

SERVICE
MANUAL

2215B

marantz

model 2215B

Stereophonic Receiver

TABLE OF CONTENTS

SECTION	PAGE
Introduction	1
P.W. Board	1
Test Equipment Required for Servicing	2
AM Alignment Procedure	3
FM Alignment Procedure	3
STEREO Separation Alignment	3
Muting Circuit Alignment	4
Audio Adjustment	4
Parts List	22
Technical Specifications	30

LIST OF ILLUSTRATIONS

FIGURE	PAGE
1. Dial Stringing	4
2. Front Panel Adjustment and Component Locations	5
3. Main Chassis Component Locations (Top View)	5
4. Rear Panel Adjustment and Component Locations	6
5. Main Chassis Component Locations (Bottom View)	6
6. Rear Panel Adjustment and Facilities Locations for European Model	7
7. Main Chassis Component Locations (Top View) for European Model	7
8. FM/AM Tuner Assembly (P100) Schematic Diagram	8
9. FM/AM Tuner Assembly (P100) Component Locations	8
10. EQ Amplifier (P400) Schematic Diagram	9
11. EQ Amplifier (P400) Component Locations	9
12. Main Amplifier (P700) Schematic Diagram	10
13. Main Amplifier (P700) Component Locations	10
14. Power Supply Assembly (P800) Schematic Diagram	11
15. Power Supply Assembly (P800) Component Locations	11
16. Tone Amplifier (PE01) Schematic Diagram	12
17. Tone Amplifier (PE01) Component Locations	12
18. Muting Hi Filter Assembly (PH01) Schematic Diagram	13
19. Muting Hi Filter Assembly (PH01) Component Locations	13
20. Loudness and Monitor Assembly (PT01) Schematic Diagram	13
21. Loudness and Monitor Assembly (PT01) Component Locations	13
22. Dial Lamp Assembly (PZ01) Schematic Diagram	14
23. Dial Lamp Assembly (PZ01) Component Location	14
24. Wiring Diagram	15
25. Schematic Diagram	17
26. Exploded Mechanical Diagram	19
27. Packing	21

TABLE	PAGE
1. Test Equipment Required for Servicing	2

INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2215B Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the receiver.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

1. P.W. Board

As can be seen from the circuit diagram, the chassis of Model 2215B consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

- | | |
|--------------------|----------------------------|
| 1. FM/AM Tuner | mounted on P.W. Board P100 |
| 2. Phono Amplifier | mounted on P.W. Board P400 |
| 3. Power Amplifier | mounted on P.W. Board P700 |
| 4. Power Supply | mounted on P.W. Board P800 |
| 5. Dial Lamp | mounted on P.W. Board PZ01 |
| 6. Monitor, Switch | mounted on P.W. Board PT01 |
| 7. Muting, Switch | mounted on P.W. Board PH01 |
| 8. Tone Amplifier | mounted on P.W. Board PE01 |

2. Test Equipment Required for Servicing

Table 1 lists the test equipment required for servicing the Model 2215B Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment.
Test Loop		Used with AM signal generator.
FM Signal Generator	Less than 0.3% distortion	Signal source for FM alignment.
Stereo Modulator	Less than 0.3% distortion	Stereo separation alignment and trouble shooting.
Frequency Counter		MPX oscillator adjustment (VCO).
Audio Oscillator	Weston Model CVO-100P, less than 0.02% residual distortion is required.	Sinewave and squarewave signal source.
Oscilloscope	High sensitivity with DC horizontal and vertical amplifiers.	Waveform analysis and trouble shooting, and ASO alignment.
VTVM	With AC, DC, RF range	Voltage measurements.
Circuit Tester		Trouble shooting.
AC Wattmeter	Simpson, Model 390	Monitors primary power to amplifier.
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition.
Line Voltmeter	Commercial Grade (0-150VAC)	Monitors potential of primary power to amplifier.
Variable Autotransformer (0-140VAC, 10 amps.)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.
Shorting Plug	Use phono plug with 600 ohm across center pin and shell.	Shorts amplifier input to eliminate noise pickup.
Output Load (8 ohms, 0.5%, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load (4 ohms, 0.5%, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.

Table 1. Test Equipment Required for Servicing

3. AM Alignment Procedure

3.1 AM IF Alignment

1. Connect a sweep generator to the test point A or J105 and an alignment scope to J112.
2. Rotate each core of IF transformer L203 and L204 for maximum height and flat top symmetrical response.

3.2 AM Frequency Range and Tracking Alignment

1. Set AM signal generator to 525 kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end) and adjust the oscillator coil L202 for maximum audio output.
2. Set the signal generator to 1650 kHz. Place the tuning pointer in the high frequency end and adjust the oscillator trimmer on the oscillator tuning capacitor (CA-2) for maximum audio output.
3. Repeat steps 1 and 2 until no further adjustment is necessary.
4. Set the generator 600 kHz and tune the receiver to the same frequency and adjust a slug core of AM ferrite antenna for maximum output.
5. Set the generator to 1400 kHz and tune the receiver to the same frequency and adjust the trimming capacitors of Antenna (CA-1) for maximum output.
6. Repeat steps 4 and 5 until no further adjustment is necessary.

Note: During tracking alignment reduce the signal generator output as necessary to avoid AGC action.

4. FM Alignment Procedure

1. Connect an FM signal generator to the FM antenna terminals and an oscilloscope and an audio distortion analyzer to the tape output jacks on the rear panel.
2. Set the FM SG to 87.5 MHz and provide about 3 to 5 μ V. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the core of oscillator coil L103 to obtain maximum audio output.
3. Set the FM SG to 108.5 MHz and provide about 3 to 5 μ V output. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor CF-3 for maximum output.
4. Repeat steps 2 and 3 until no further adjustment is necessary.
5. Set the FM SG to 90 MHz and tune the receiver to the same frequency. Decrease signal generator output until the audio output level decreases with the decreasing generator output. Adjust the antenna coil L101, RF coil L102 and IF transformer L105 for minimum audio distortion.
6. Set the FM SG to 106 MHz and tune the receiver to the same frequency. Adjust the trimming capacitor CF-1, CF-2 for minimum distortion.
7. Repeat steps 5 and 6 until no further adjustment is necessary.
8. Connect a DC VTVM with ± 0.5 volt range selected to the test point (E) (J116) and adjust the secondary core (upper) of discriminator transformer L106 so that no voltage reading is obtained on the VTVM at no signal.
Next set the FM SG to 98 MHz and increase the output level to 1 μ V, then tune the receiver to the same frequency so that no deflection is obtained.
Adjust primary core (bottom) of L106 for minimum distortion, and adjust the L107 for the maximum reading on the VTVM connected to the J114.

5. STEREO Separation Alignment

1. Set the FM SG to provide 1 μ V at 98 MHz.
Tune the receiver to the same frequency perfectly.
2. Turn the FM SG modulation off (with the pilot signal turned off), connect a frequency counter to test point J120, and adjust R302 so that the frequency counter may precisely read 19 kHz.
3. Modulate the FM SG with stereo composite signal consisting of only subchannel signal (of course a pilot signal must be included).
4. Adjust the trimming resistor R301 for maximum and same separation in both channels.

6. Muting Circuit Alignment

Set the FM SG output to provide $25\ \mu\text{V}$ (IHF) at 98 MHz and tune the receiver to the same frequency.

Adjust the trimming resistor R161 for the threshold level of $25\ \mu\text{V}$ (during this adjustment turn the MUTING pushswitch "on").

7. Audio Adjustment

Connect a VTVM across the resistor R735 and adjust the trimming resistor R727 until the VTVM reads 10.0 mV DC.

For the other channel connect the VTVM across the R736 and adjust the R728 for the same reading.

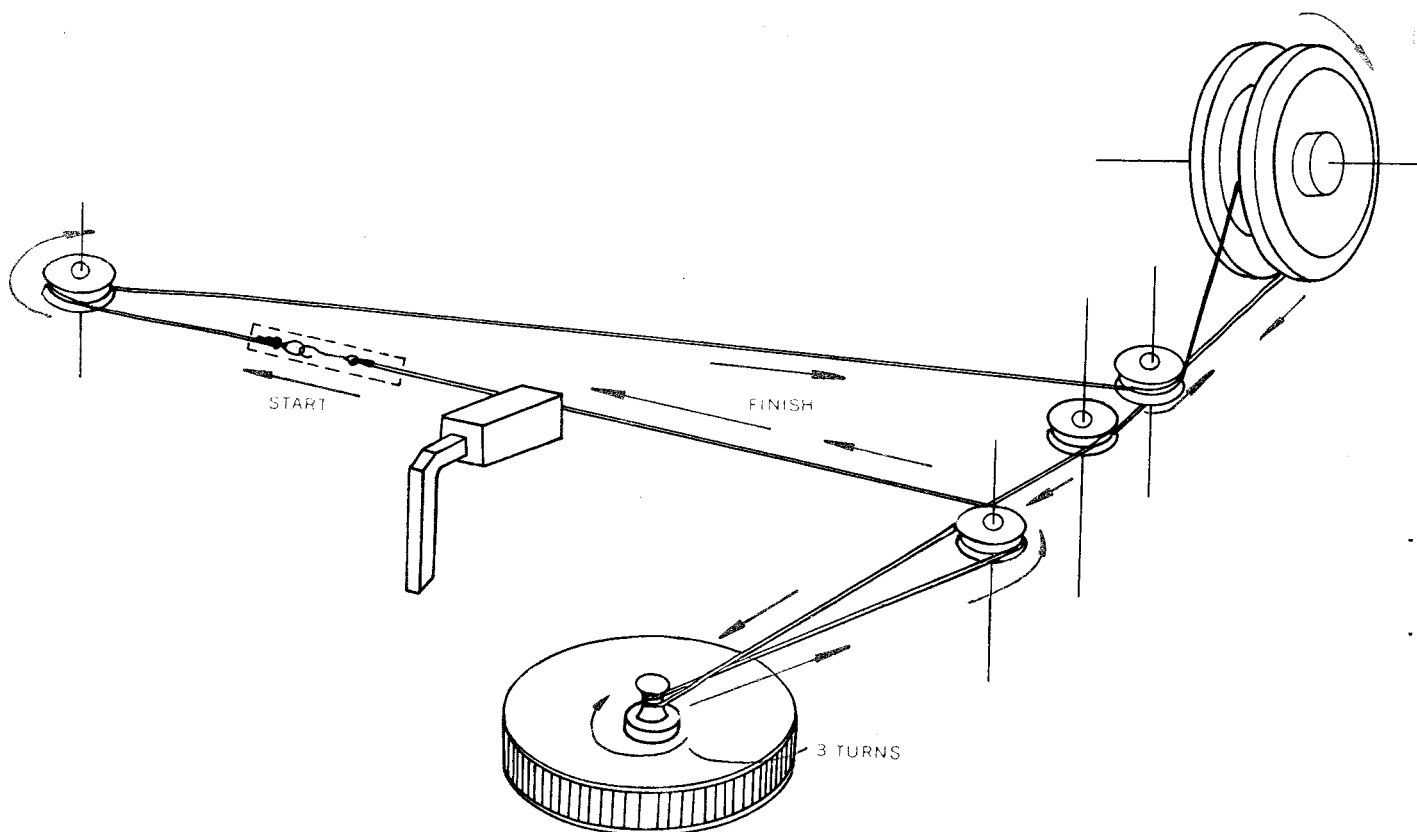


Figure 1. Dial Stringing

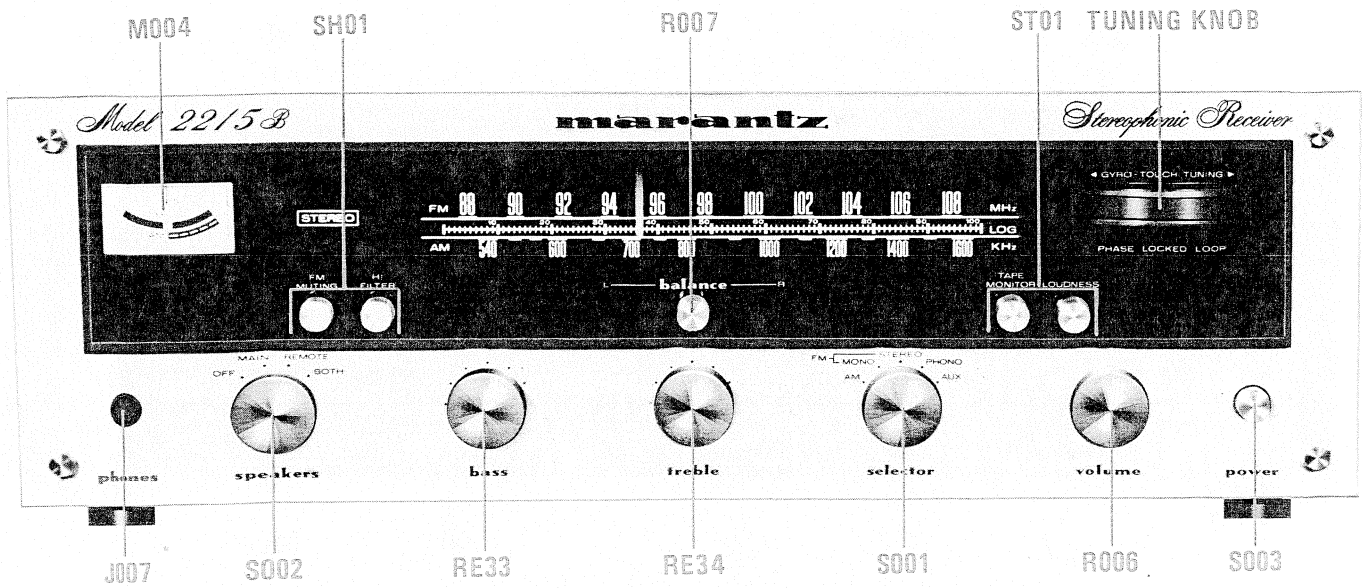


Figure 2. Front Panel Adjustment and Component Locations

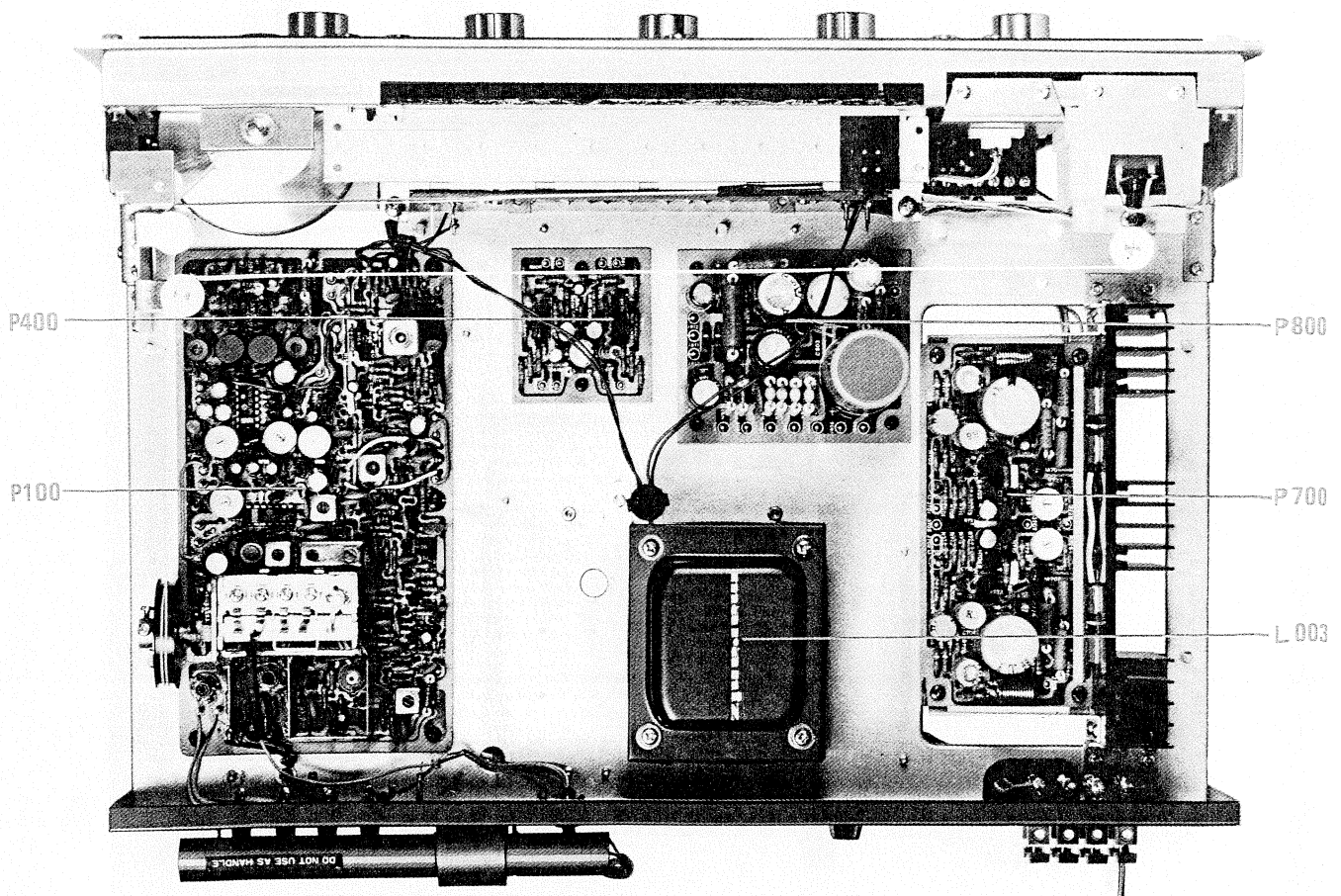


Figure 3. Main Chassis Component Locations (Top View)

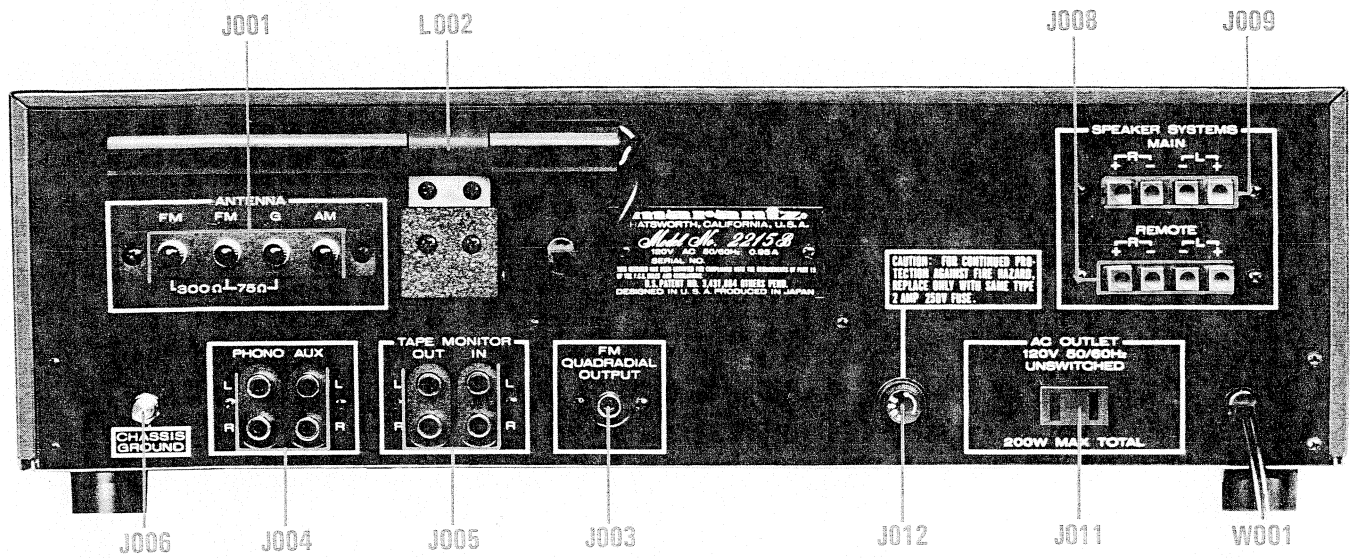


Figure 4. Rear Panel Adjustment and Component Locations

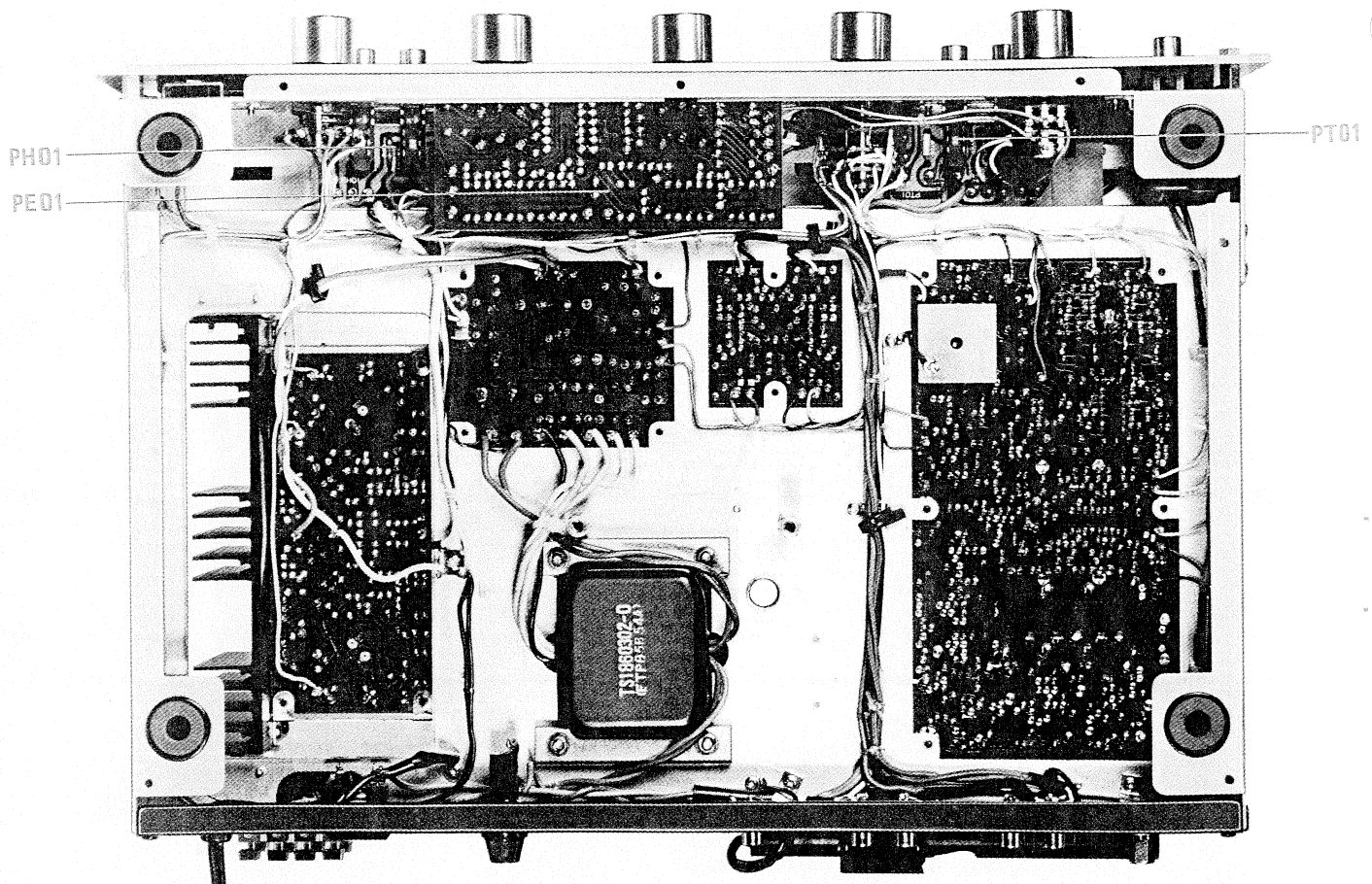


Figure 5. Main Chassis Component Locations (Bottom View)

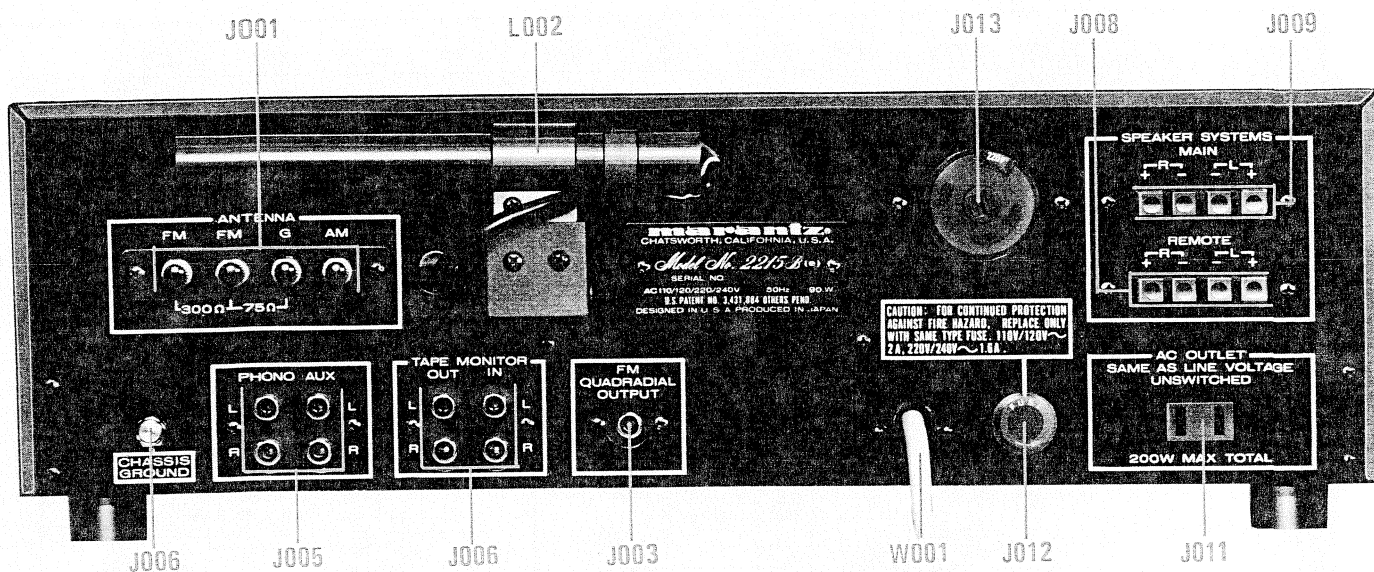


Figure 6. Rear Panel Adjustment and Facilities Locations for European Model

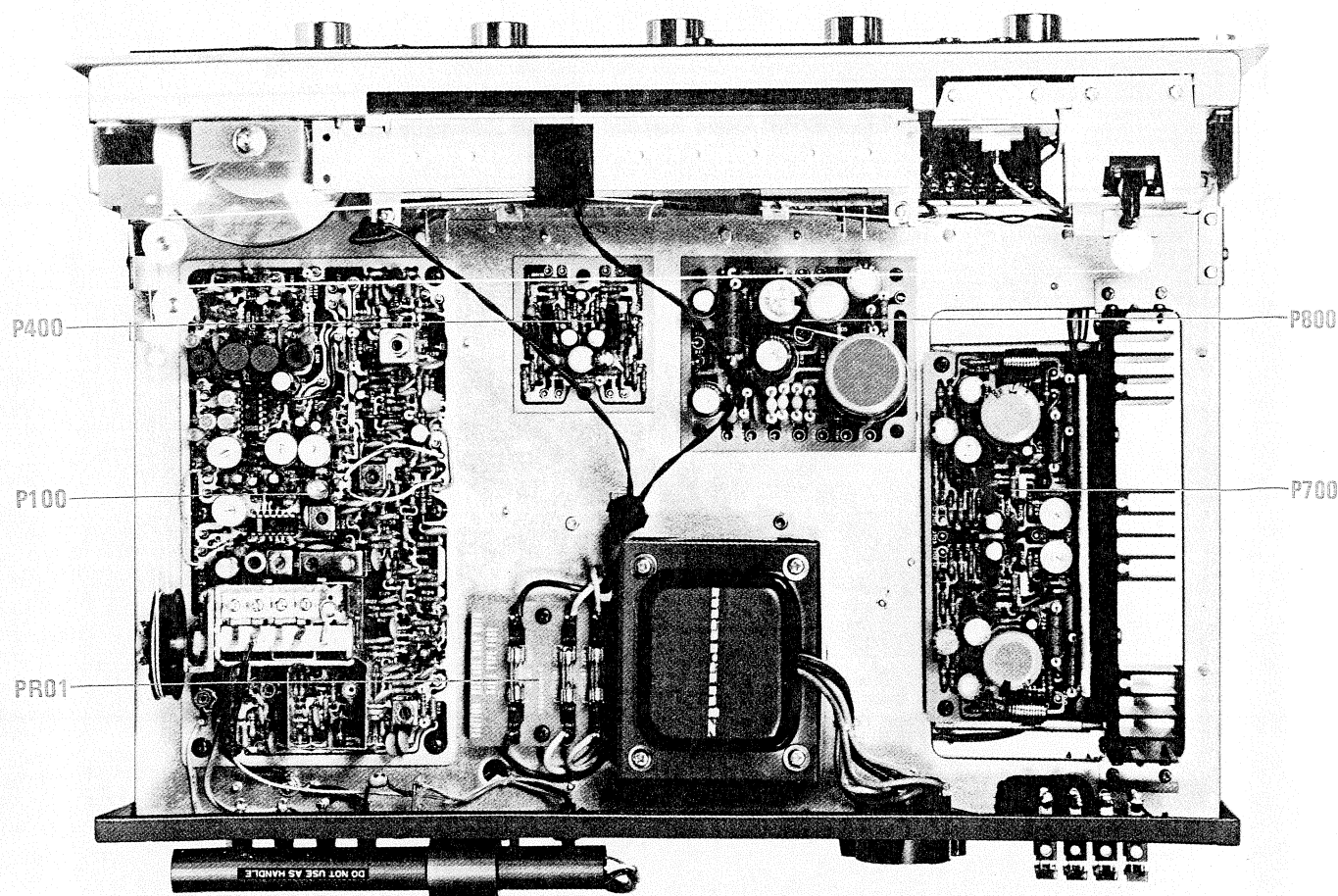


Figure 7. Main Chassis Component Locations (Top View) for European Model

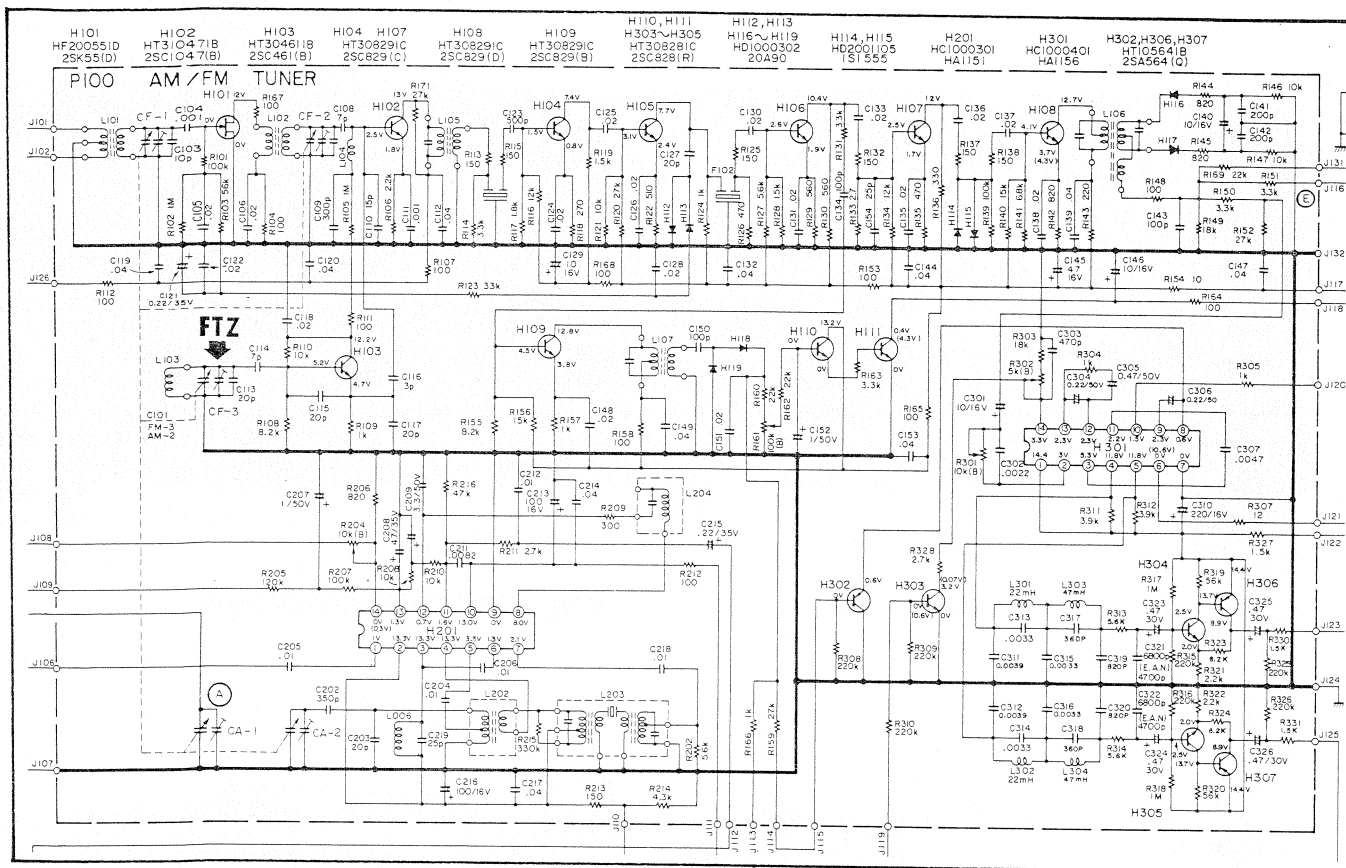


Figure 8. FM/AM Tuner Assembly (P100) Schematic Diagram

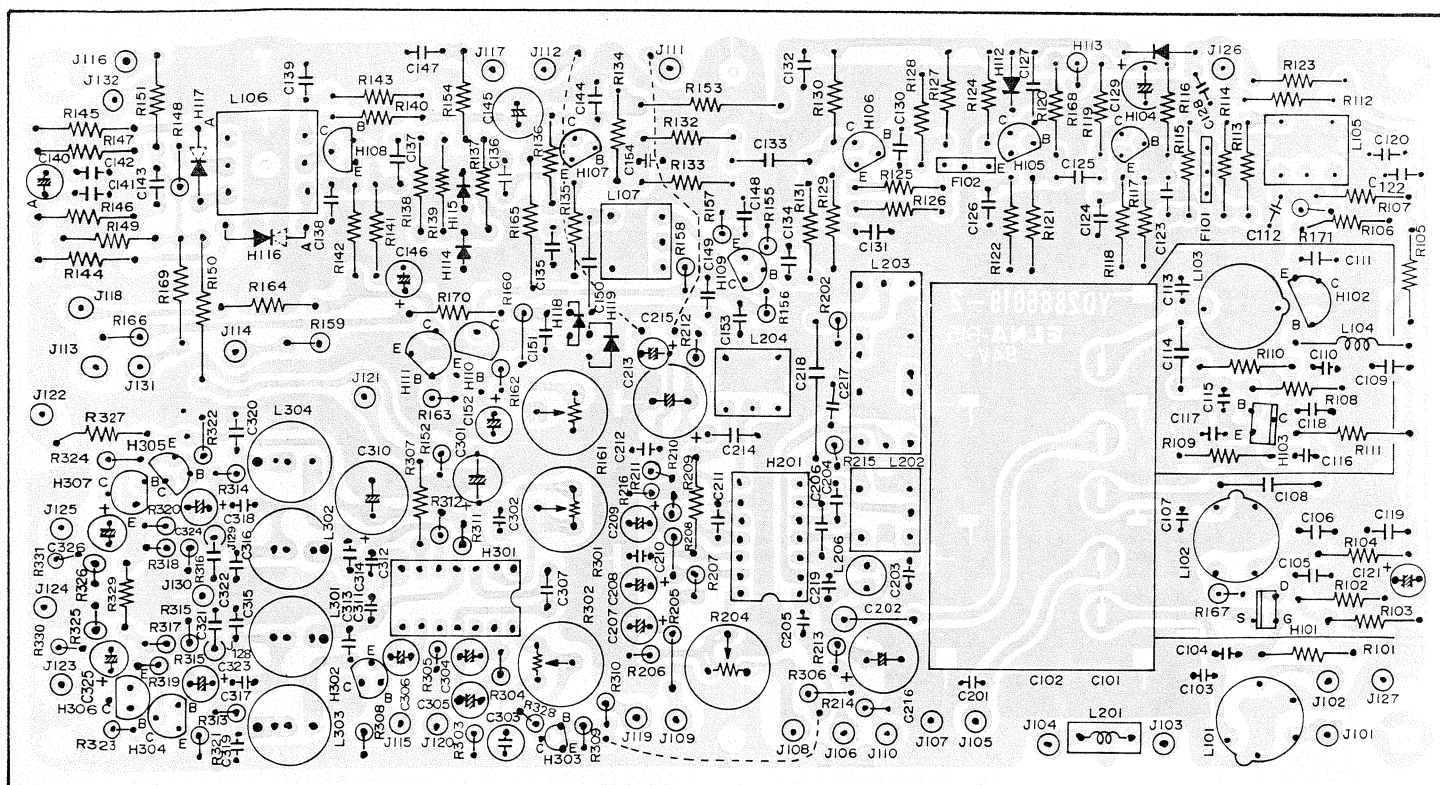


Figure 9. FM/AM Tuner Assembly (P100) Component Locations

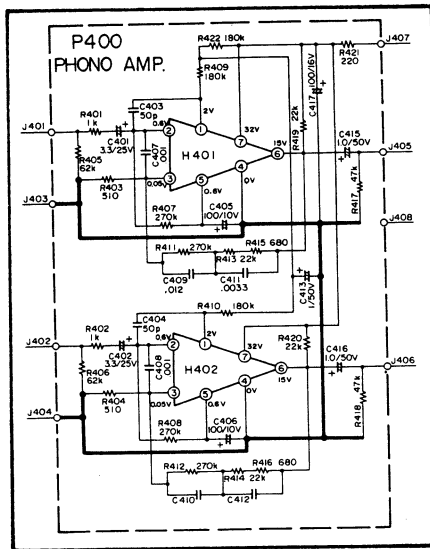


Figure 10. EQ Amplifier (P400) Schematic Diagram

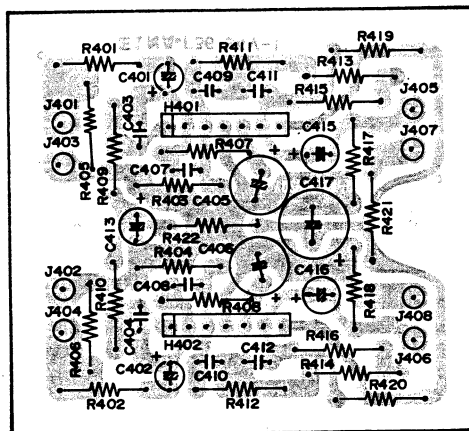
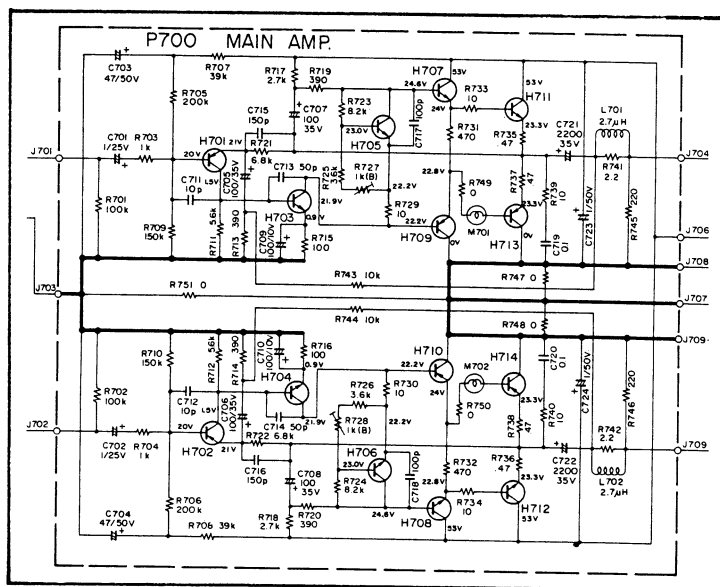


Figure 11. EQ Amplifier (P400) Component Locations



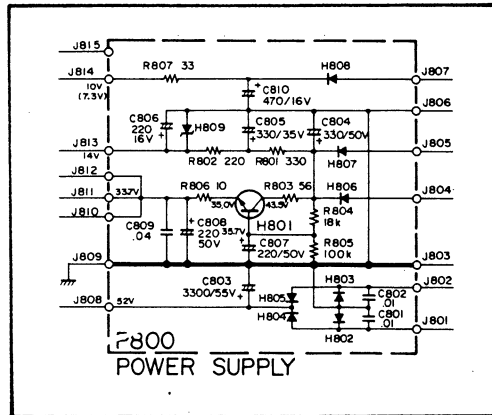


Figure 14. Power Supply Assembly (P800) Schematic Diagram

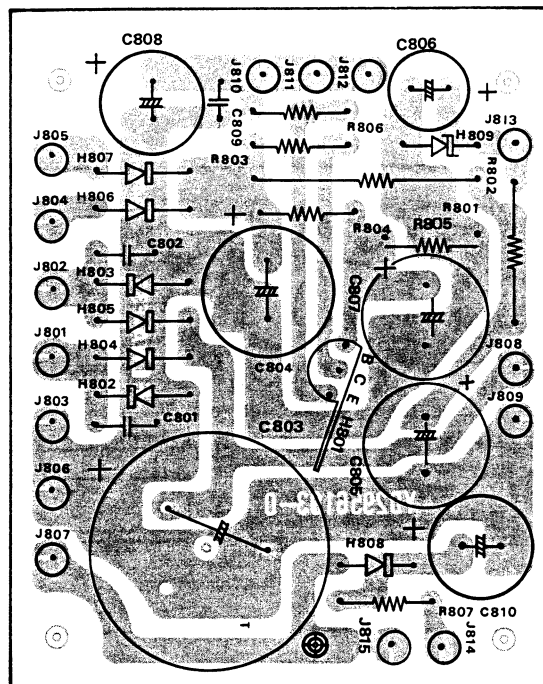


Figure 15. Power Supply Assembly (P800) Component Locations

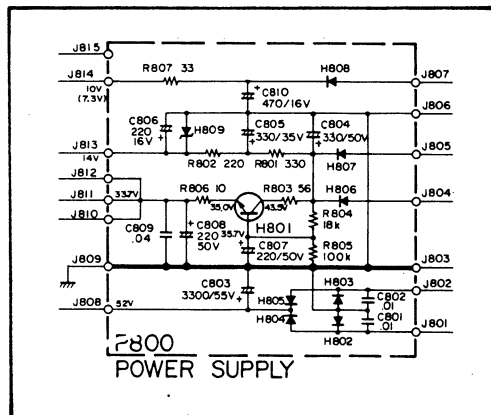


Figure 14. Power Supply Assembly (P800) Schematic Diagram

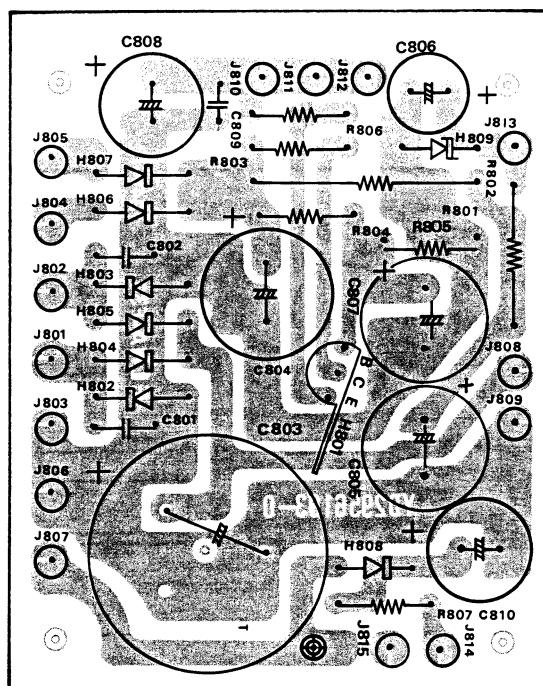


Figure 15. Power Supply Assembly (P800) Component Locations

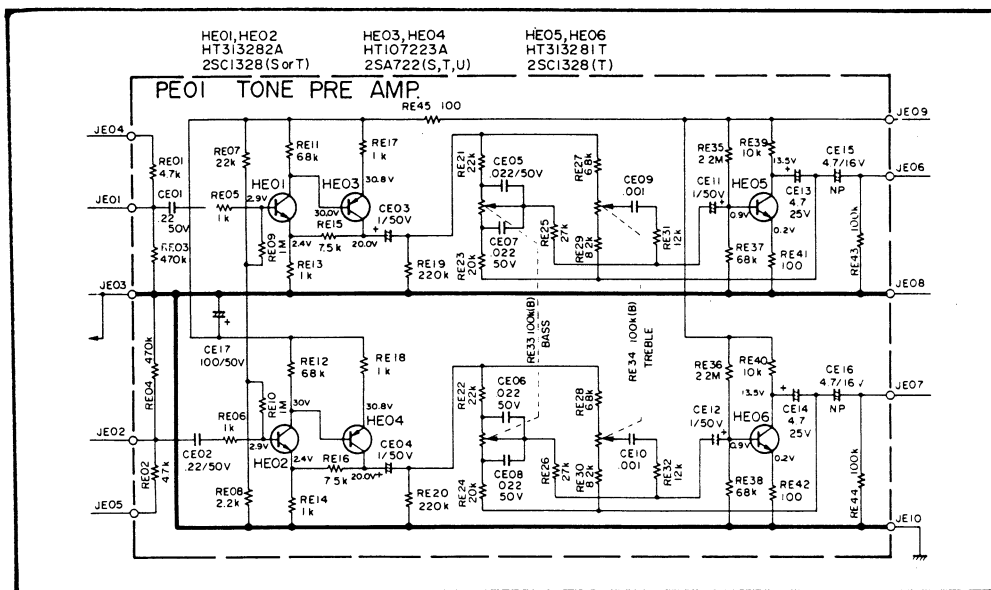


Figure 16. Tone Amplifier (PE01) Schematic Diagram

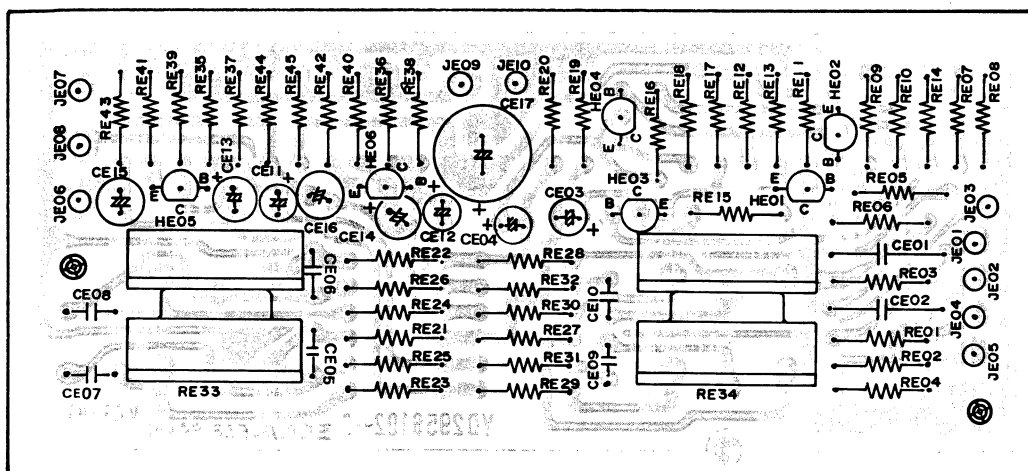


Figure 17. Tone Amplifier (PE01) Component Locations

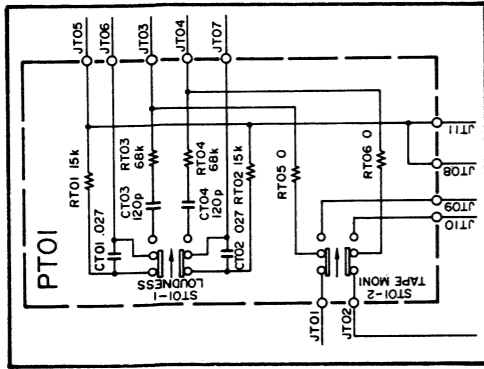


Figure 20. Loudness and Monitor Assembly (PT01) Schematic Diagram

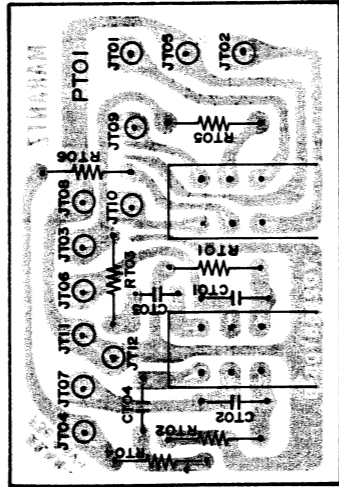


Figure 21. Loudness and Monitor Assembly (PT01) Component Locations

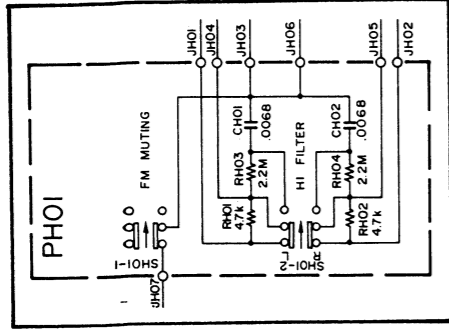


Figure 18. Muting Hi Filter Assembly (PH01) Schematic Diagram

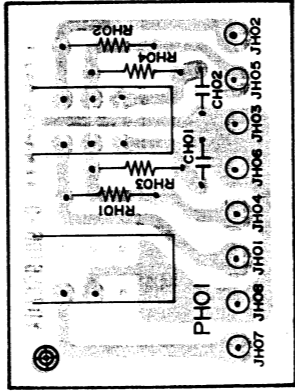


Figure 19. Muting Hi Filter Assembly (PH01) Component Locations

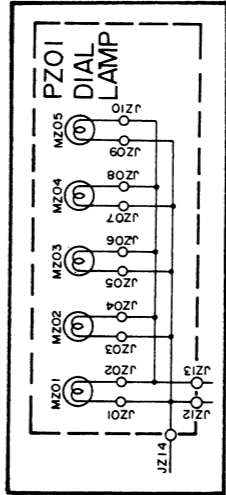


Figure 22. Dial Lamp Assembly (PZ01) Schematic Diagram

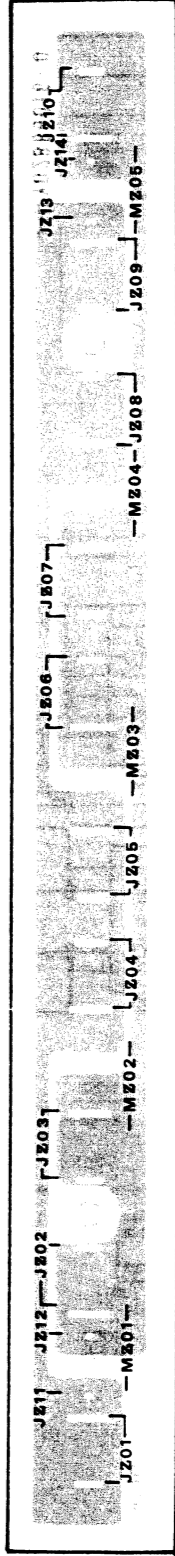


Figure 23. Dial Lamp Assembly (PZ01) Component Location

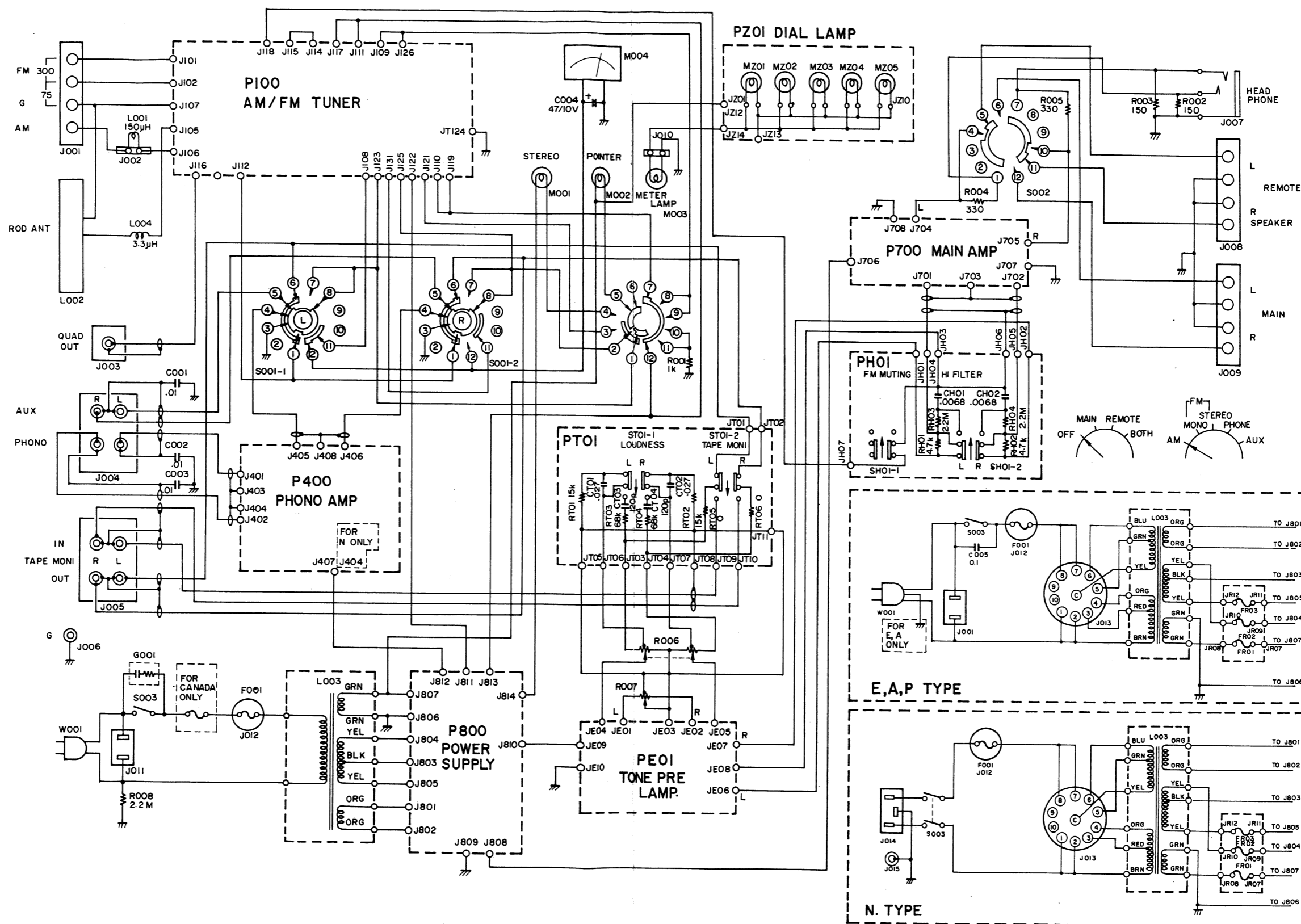


Figure 24. Wiring Diagram

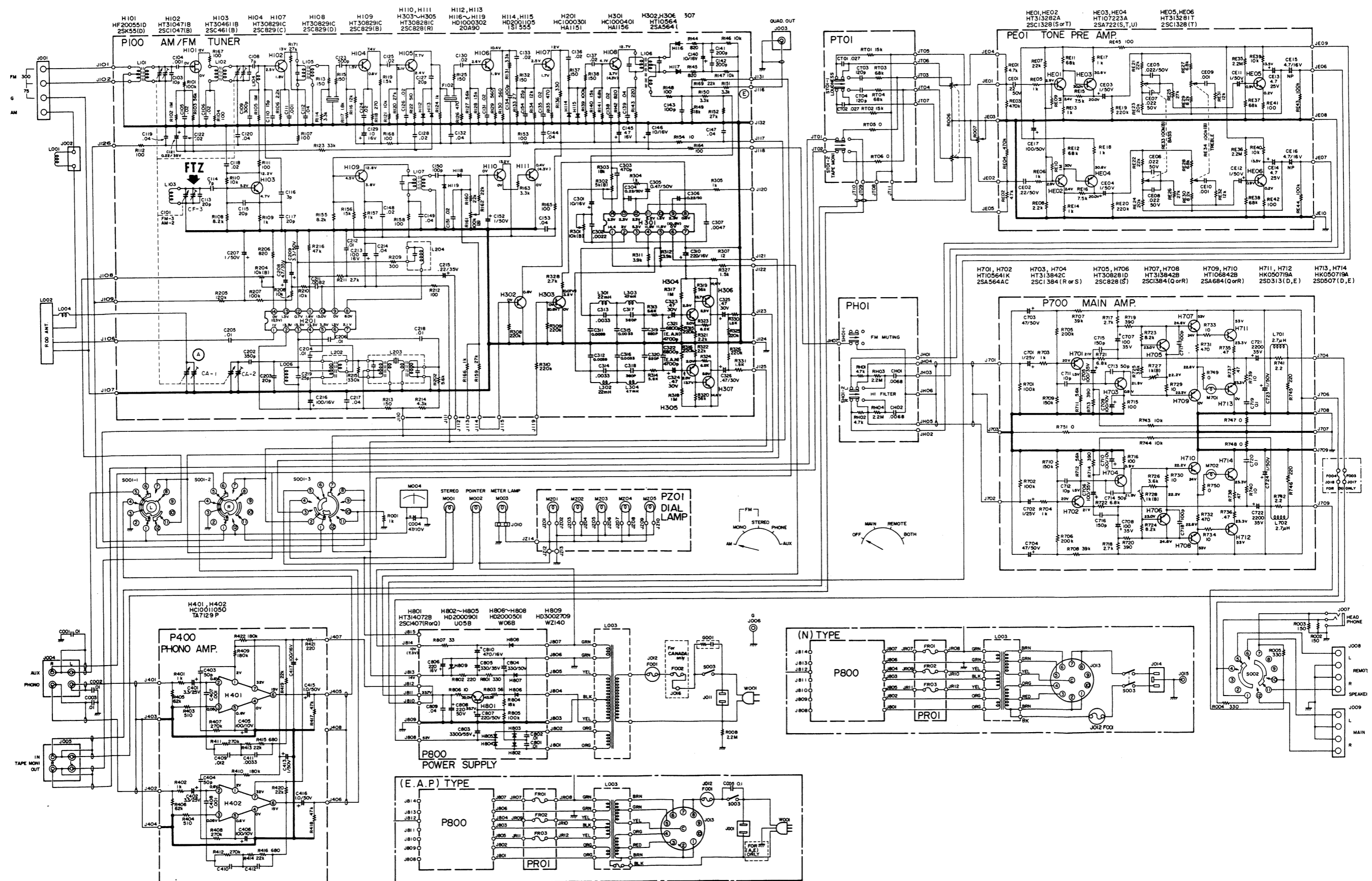


Figure 25. Schematic Diagram

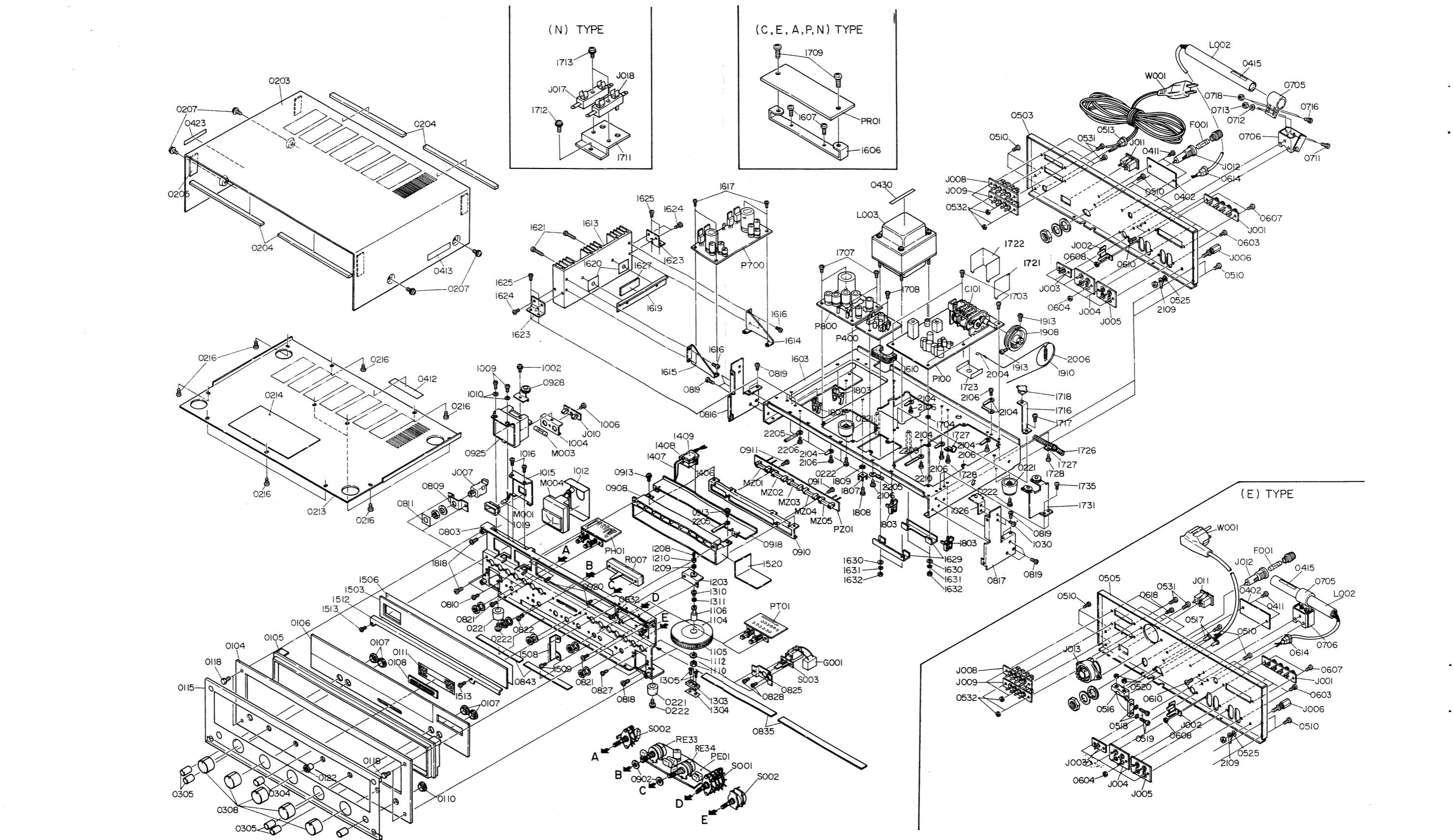


Figure 26. Exploded Mechanical Diagram

PARTS LIST

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
A	1	1	1	1	295606340	Front Panel Assembly
0104	1	1	1	1	295606301	Escutcheon
0105	1	1	1	1	285340101	Frame
0106	1	1	1	1	295615801	Window
0107	4	4	4	4	288625901	Bushing
0108	1	1	1	1	285425901	Bushing
0110	1	1	1	1	281825905	Bushing
0111	1	1	1	1	291510701	Sheet
0115	1	1	1	1	291505301	Cover
B	1	1	1	1	295625740	Lid Assembly, Upper
0203	1	1	1	1	295625701	Lid
0204	4	4	4	4	257711803	Spacer
0205	4	4	4	4	285605601	Buffer
C	1	1	1	1	295625741	Lid Assembly, Lower
0213	1	1	1	1	295625702	Lid
0214	1	1	1	1	288812001	Insulator
D				1	295616040	Rear Panel Assembly
0505				1	295616022	Bracket
0516				1	282125901	Bushing
0517				2	55060305S	T.R. Rivet
E	1	1	1	1	285327340	Flywheel Assembly
1104	2	2	2	2	257706302	Escutcheon
1105	1	1	1	1	257727301	Flywheel
1106	1	1	1	1	285311201	Shaft
1110	1	1	1	1	53110603E	Hexagon Nut
1112	1	1	1	1	54020601E	Flat Washer, P
F	1	1	1	1	291510340	Pointer Assembly
1406	1	1	1	1	291510301	Pointer
1407	1	1	1	1	281810302	Pointer
1408	1	1	1	1	291510302	Pointer
1409	1	1	1	1	291526703	Heatsink
M002	1	1	1	1	IN1008030	Lamp
G	1	1	1	1	281915941	Drum Assembly
1908	1	1	1	1	281915901	Drum
1910	1	1	1	1	71101569M	Spring
1913	2	2	2	2	51064019A	Set Screw
H	1	1	1	1	120200640	Hook Assembly
2004	1	1	1	1	120225801	Hook
2006	1	1	1	1	72080802A	String
0118	4	4	4	4	52017039J	Bolt
0122	1	1	1	1	289205502	Collar
0207	4	4	4	4	51480406S	B.H.M. Screw F, B4x6
0216	11	11	11	11	51100406S	B.H.M. Screw, B4x6
0221	4	4	4	4	293205701	Leg
0222	4	4	4	4	51440410S	P.H.M. Screw S, P4x10
0304	1	1	1	1	285015401	Knob, Slide Volume
0305	4	4	4	4	288615403	Knob, Push Switch
0306	1	1	1	1	290415404	Knob, Power Switch
0308	5	5	5	5	281815403	Knob
0402	1				295626501	Indicator
0403		1			295626502	Indicator
0404			1		295626503	Indicator
0410				1	295626509	Indicator
0411	2	2	2	2	51100305S	B.H.M. Screw, B3x5
0412	1	1	1	1	257886101	Label, UL Caution
0413	1	1	1	1	293286101	Label, Do not remove
0415	1	1	1	1	250626506	Indicator, Do not use as.....
0419		1			951091101	Label, LL No.
0420		1			282186102	Label, Fuse Caution
0421	1				951091102	Label, UL Factory No.
0423	1				281886101	Label, FTC
0424	1				951110101	Label, UL
0425		1			245786104	Label, CSA
0430	1	1	1	1	288686101	Label, on Power Transformer
0432		1	1		951061102	Label, 2A
0433				1	288286102	Label,
0434				2	951260102	Label, 2.5 AT 250V
0503	1	1			295616021	Bracket
0506			1		295616023	Bracket
0510	6	6	6	6	51100306S	B.H.M. Screw, B3x6
0513	1	1			145525903	Bushing
0518			2		54050300R	T.L. Washer, OR
0519			2		51060316A	P.H.M. Screw, P3x16
0520			2		53110303A	Hexagon Nut
0525	1	1	1	1	54050400R	T.L.Washer, OR
0531	4	4	4	4	51100308S	B.H.M. Screw, B3x8
0532	4	4	4	4	53110303A	Hexagon Nut
0603	6	6	6	6	51100308S	B.H.M. Screw, B3x8
0604	6	6	6	6	53110303A	Hexagon Nut
0607	2	2	2	2	51100308S	B.H.M. Screw, B3x8
0608	1	1	1	1	53110303E	Hexagon Nut
0610	3	3	3	3	51100306S	B.H.M. Screw, B3x6
0614	1	1			145525903	Bushing
0615				1	145525907	Bushing
0616			1		318827102	Holder
0618			2	2	51100308S	B.H.M. Screw, B3x8
0621			1		54050400R	T.L. Washer, OR
0622			2		51100308S	Holder
0623			2		54050300R	T.L. Washer, OR
0624			2		53110303E	Hexagon Nut
0705	1	1	1	1	281927103	Holder
0706	1	1	1	1	257816052	Bracket, K
0711	2	2	2	2	51100310S	B.H.M. Screw, B3x10
0712	2	2	2	2	54050300R	T.L. Washer, OR
0713	2	2	2	2	53110303E	Hexagon Nut
0716	2	2	2	2	51100310S	B.H.M. Screw, B3x10
0718	2	2	2	2	53110303E	Hexagon Nut
0803	1	1	1	1	291516050	Bracket, K
0809	1	1	1	1	291516006	Bracket
0810	2	2	2	2	51100306A	B.H.M. Screw, B3x6
0811	1	1	1	1	289610701	Sheet

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
0816	1	1	1	1	281816003	Bracket
0817	1	1	1	1	281816004	Bracket
0818	4	4	4	4	51100405A	B.H.M. Screw, B4x5
0819	10	10	10	10	51570306B	P.H. Tapped Screw, P3x6
0821	4	4	4	4	51100306A	B.H.M. Screw, B3x6
0822	2	2	2	2	51100306A	B.H.M. Screw, B3x6
0825	1	1	1	1	291516005	Bracket
0827	2	2	2	2	51100306A	B.H.M. Screw, B3x6
0828	2	2	2	2	51060306A	B.H.M. Screw, B3x6
0832	2	2	2	2	51470306A	B.H.M. Screw S, B3x6
0834	2	2	2	2	233612002	Insulator
0835	2	2	2	2	291612001	Insulator
0902	2	2	2	2	292705502	Collar
0908	1	1	1	1	287127401	Reflector
0910	1	1	1	1	287127101	Holder
0911	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
0913	2	2	2	2	51480306A	B.H.M. Screw F, B3x6
0918	1	1	1	1	287105102	Guide
0920	2	2	2	2	51042608A	F.H.M. Screw, F2.6x8
0925	1	1	1	1	285427401	Reflector
0928	1	1	1	1	295626250	Pulley, K
1002	1	1	1	1	51480308A	B.H.M. Screw F, B3x8
1004	1	1	1	1	285427101	Holder
1006	1	1	1	1	51570305B	P.H. Tapped Screw, P3x5
1009	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
1010	2	2	2	2	54050300R	T.L. Washer, OR
1012	1	1	1	1	288610701	Sheet
1015	1	1	1	1	291516004	Bracket
1016	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
1019	1	1	1	1	291225901	Bushing
1026	1	1	1	1	291626251	Pulley, K
1030	2	2	2	2	51100305A	B.H.M. Screw, B3x5
1203	1	1	1	1	285310650	Bearing, K
1208	1	1	1	1	51640410D	Set Screw, C.P.
1209	1	1	1	1	54040402N	Spring Washer
1210	1	1	1	1	53110403E	Hexagon Nut
1303	1	1	1	1	257710602	Bearing
1304	1	1	1	1	141511801	Spacer
1305	2	2	2	2	51040306A	F.H.M. Screw, F3x6
1310	1	1	1	1	285011202	Shaft
1311	1	1	1	1	54040402N	Spring Washer
1503	1	1	1	1	295630201	Dial
1506	1	1	1	1	285310701	Sheet
1508	1	1	1	1	285326901	Protector
1509	2	2	2	2	51570305B	P.H. Tapped Screw, P3x5
1512	1	1	1	1	291526901	Protector
1513	2	2	2	2	51570305B	P.H. Tapped Screw, P3x5
1515	1	1	1	1	287105302	Cover
1520	1	1	1	1	281912005	Insulator
1603	1	1	1	1	295610550	Chassis, K
1606		1	1	1	285416003	Bracket
1607		2	2	2	51570306B	P.H. Tapped Screw, P3x6
1610	1	1	1	1	288925901	Bushing
1613	1	1	1	1	389926701	Heatsink
1614	1	1	1	1	295616002	Bracket
1615	1	1	1	1	295616003	Bracket
1616	4	4	4	4	51380306P	P.H. Tapped Screw, P3x6
1617	4	4	4	4	51100306S	B.H.M. Screw, B3x6
1619	1	1	1	1	295600501	Clamper
1620	2	2	2	2	287411801	Spacer
1621	2	2	2	2	51100312A	B.H.M. Screw, B3x12
1623	2	2	2	2	295616004	Bracket
1624	4	4	4	4	51380306P	P.H. Tapped Screw, P3x6
1625	4	4	4	4	51570306B	P.H. Tapped Screw, P3x6
1627	1	1	1	1	391711801	Spacer
1629	2	2	2	2	295616005	Bracket
1630	4	4	4	4	54020401A	Flat Washer, P
1631	4	4	4	4	54040402A	Spring Washer
1632	4	4	4	4	53110403A	Hexagon Nut
1703	6	6	6	6	51100306S	P.H. Tapped Screw, P3x6
1704	1	1	1	1	59030810P	Washer
1707	4	4	4	4	51570306S	P.H. Tapped Screw, P3x6
1708	2	2	2	2	51570306S	P.H. Tapped Screw, P3x6
1709		2	2	2	51100306S	B.H.M. Screw, B3x6
1711				1	295616007	Bracket
1712				1	51570306B	P.H. Tapped Screw, P3x6
1713				2	51062606B	P.H.M. Screw, P2.6x6
1716	1	1	1	1	292716005	Bracket
1717	1	1	1	1	51570306B	P.H. Tapped Screw, P3x6
1718	1	1	1	1	290825901	Bushing
1721	1	1	1	1	282110901	Shield
1722	1	1	1	1	389610903	Shield
1723	1	1	1	1	285010902	Shield
1726	1	1	1	1	288210901	Shield
1727	2	2	2	2	295600502	Clamper
1728	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
1731	1	1	1	1	295626251	Pulley, K
1735	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
1803	7	7	7	7	288600506	Clamper
1804	1	1	1	1	288600505	Clamper
1807	1	1	1	1	291012301	Contacto
1808	1	1	1	1	51570306B	P.H. Tapped Screw, P3x6
1809	1	1	1	1	54050300R	T.L. Washer, OR
2008	1	1	1	1	56382540G	Eyelet
2104	2	2	2	2	62030039W	Lug, Tuner
2106	6	6	6	6	51570306B	P.H. Tapped Screw, P3x6
2109	1	1	1	1	62041760W	Lug, Phono
2110				1	62041760W	Lug
2111				1	54050400R	T.L. Washer, OR
2112	1	1	1	1	62030039W	Lug
2113	1	1	1	1	62030039W	Lug
2114	1	1	1	1	62030039W	Lug
2115	1	1	1	1	62030039W	Lug
2116	1	1			62030039W	Lug
2117			1	1	62030039W	Lug
2205	3	3	3	3	138200503	Clamper
2206	2	2	2	2	51570306B	P.H. Tapped Screw, P3x6
2209	1	1	1	1	287100501	Clamper
2210	1	1	1	1	51570306B	P.H. Tapped Screw, P3x6
2302	1				295685101	Instructions, Set
2303		1	1	1	295685131	Instructions, Set
2306				1	295685103	Instructions, Leaflet
2307		1			288685110	Instructions, Leaflet
2313	1	1	1	1	295685605	Schematic
2314	1	1	1		281885108	Instructions, Accessories
2316				1	291585102	Instructions, Accessories
2317	1	1	1		281885104	Instructions, Packing

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
2323	1				281885402	Guarantee Card
2324	1	1	1	1	257785401	Guarantee Card
2325	1	1	1	1	257785102	Instructions, Red Tag
2326	1				257781301	Envelope
2327			1	1	281881301	Envelope
2329		1			291881301	Envelope
2402	1	1	1		295680101	Packing Case, Inner
2403	1	1	1		295680102	Packing Case, Outer
2406				1	295680105	Packing Case, Inner
2407				1	295680106	Packing Case, Outer
2408	1	1	1		344880301	Cushion, Upper
2409	1	1	1		344880301	Cushion, Lower
2411	1	1	1		291810715	Sheet, Upper Lid
2412	1	1	1		901453835	Polyethylene Bag, Set
2414	1	1	1	1	901302501	Polyethylene Bag, Printed Matter
2415	1	1	1	1	901302501	Polyethylene Bag, Accessories
2416		2			951090102	Label, On Packing Case
2417	1	1	1		102980401	Sleeve
2418			1		956000004	Hang Tag
2419	1	1	1	1	273182101	Silicagel
2420	1	1	1	1	281905601	Buffer
2421				1	344880701	Reinforcing
2422	4				952281501	Serial No. Card
2423		4			952301512	Serial No. Card
2424			4		952301511	Serial No. Card
2425				4	952301513	Serial No. Card
2430				1	288286101	Label, on Packing Case
2432	1	1	1	1	ZA0200007	Ext. Antenna
P100						
	1	1	1	1	YD2886019	P.W. Board
	1	1			ZZ2956119	P.W. Board Assembly
				1	ZZ2956819	P.W. Board Assembly
P108	8	8	8	8	293311802	Spacer, R112, R164, R327, R154
P107	1	1	1	1	344411805	Spacer, R212
R101	1	1	1	1	RT0510414	Resistor, 100KΩ ±5% ¼W
R102	1	1	1	1	RT0510514	Resistor, 1MΩ ±5% ¼W
R103	1	1	1	1	RT0556314	Resistor, 56KΩ ±5% ¼W
R104	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R105	1	1	1	1	RT0510514	Resistor, 1MΩ ±5% ¼W
R106	1	1	1	1	RT0522214	Resistor, 2.2KΩ ±5% ¼W
R107	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R108	1	1	1	1	RT0582214	Resistor, 8.2KΩ ±5% ¼W
R109	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R110	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R111	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R112	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R113	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R114	1	1	1	1	RT0533214	Resistor, 3.3KΩ ±5% ¼W
R115	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R116	1	1	1	1	RT0512314	Resistor, 12KΩ ±5% ¼W
R117	1	1	1	1	RT0518214	Resistor, 1.8KΩ ±5% ¼W
R118	1	1	1	1	RT0527114	Resistor, 270Ω ±5% ¼W
R119	1	1	1	1	RT0515214	Resistor, 1.5KΩ ±5% ¼W
R120	1	1	1	1	RT0527314	Resistor, 27KΩ ±5% ¼W
R121	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R122	1	1	1	1	RT0551114	Resistor, 510Ω ±5% ¼W
R123	1	1	1	1	RT0533314	Resistor, 33KΩ ±5% ¼W
R124	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R125	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
P100 TUNER BOARD						
R126	1	1	1	1	RT0547114	Resistor, 470Ω ±5% ¼W
R127	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R128	1	1	1	1	RT0515214	Resistor, 1.5KΩ ±5% ¼W
R129	1	1	1	1	RT0556114	Resistor, 560Ω ±5% ¼W
R130	1	1	1	1	RT0556114	Resistor, 560Ω ±5% ¼W
R131	1	1	1	1	RT0533214	Resistor, 3.3KΩ ±5% ¼W
R132	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R133	1	1	1	1	RT0527214	Resistor, 2.7KΩ ±5% ¼W
R134	1	1	1	1	RT0512314	Resistor, 12KΩ ±5% ¼W
R135	1	1	1	1	RT0547114	Resistor, 470Ω ±5% ¼W
R136	1	1	1	1	RT0533114	Resistor, 330Ω ±5% ¼W
R137	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R138	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R139	1	1	1	1	RT0510414	Resistor, 100KΩ ±5% ¼W
R140	1	1	1	1	RT0515314	Resistor, 15KΩ ±5% ¼W
R141	1	1	1	1	RT0568214	Resistor, 6.8KΩ ±5% ¼W
R142	1	1	1	1	RT0582114	Resistor, 820Ω ±5% ¼W
R143	1	1	1	1	RT0522114	Resistor, 220Ω ±5% ¼W
R144	1	1	1	1	RT0582114	Resistor, 820Ω ±5% ¼W
R145	1	1	1	1	RT0582114	Resistor, 820Ω ±5% ¼W
R146	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R147	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R148	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R149	1	1	1	1	RT0518314	Resistor, 18KΩ ±5% ¼W
R150	1	1	1	1	RT0533214	Resistor, 3.3KΩ ±5% ¼W
R151	1	1	1	1	RT0533214	Resistor, 3.3KΩ ±5% ¼W
R152	1	1	1	1	RT0527314	Resistor, 27KΩ ±5% ¼W
R153	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R154	1	1	1	1	RT0510014	Resistor, 10Ω ±5% ¼W
R155	1	1	1	1	RT0582214	Resistor, 8.2KΩ ±5% ¼W
R156	1	1	1	1	RT0515314	Resistor, 15KΩ ±5% ¼W
R157	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R158	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R159	1	1	1	1	RT0527314	Resistor, 27KΩ ±5% ¼W
R160	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R161	1	1	1	1	RA0104018	Trimming Resistor, 100KΩ(B)
R162	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R163	1	1	1	1	RT0533214	Resistor, 3.3KΩ ±5% ¼W
R164	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R165	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R166	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R167	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R168	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R169	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R170	1	1	1	1	RC0000012	Resistor, 0Ω
R171	1	1	1	1	RT0527314	Resistor, 27KΩ ±5% ¼W
R202	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R204	1	1	1	1	RA0103025	Trimming Resistor, 10KΩ(B)
R205	1	1	1	1	RT0512414	Resistor, 120KΩ ±5% ¼W
R206	1	1	1	1	RT0582114	Resistor, 820Ω ±5% ¼W
R207	1	1	1	1	RT0510414	Resistor, 100KΩ ±5% ¼W
R208	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R209	1	1	1	1	RT0530114	Resistor, 300Ω ±5% ¼W
R210	1	1	1	1	RT0510314	Resistor, 10KΩ ±5% ¼W
R211	1	1	1	1	RT0527214	Resistor, 2.7KΩ ±5% ¼W
R212	1	1	1	1	RT0510114	Resistor, 100Ω ±5% ¼W
R213	1	1	1	1	RT0515114	Resistor, 150Ω ±5% ¼W
R214	1	1	1	1	RT0543214	Resistor, 4.3KΩ ±5% ¼W
R215	1	1	1	1	RT0533414	Resistor, 330KΩ ±5% ¼W
R216	1	1	1	1	RT0547314	Resistor, 47KΩ ±5% ¼W

J: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R330	1	1	1	1	RT0568114	Resistor, 680Ω ±5% ¼W
R331	1	1	1	1	RT0568114	Resistor, 680Ω ±5% ¼W
R301	1	1	1	1	RA0103025	Trimming Resistor, 10KΩ (B)
R302	1	1	1	1	RA0502020	Trimming Resistor, 5KΩ (B)
R303	1	1	1	1	RT0518314	Resistor, 18KΩ ±5% ¼W
R304	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R305	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R307	1	1	1	1	RT0512014	Resistor, 12Ω ±5% ¼W
R308	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R309	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R310	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R311	1	1	1	1	RT0539214	Resistor, 3.9KΩ ±5% ¼W
R312	1	1	1	1	RT0539214	Resistor, 3.9KΩ ±5% ¼W
R313	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R314	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R313	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R314	1	1	1	1	RT0556214	Resistor, 5.6KΩ ±5% ¼W
R315	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R316	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R317	1	1	1	1	RT0510514	Resistor, 1MΩ ±5% ¼W
R318	1	1	1	1	RT0510514	Resistor, 1MΩ ±5% ¼W
R319	1	1	1	1	RT0556314	Resistor, 56KΩ ±5% ¼W
R320	1	1	1	1	RT0556314	Resistor, 56KΩ ±5% ¼W
R321	1	1	1	1	RT0522214	Resistor, 2.2KΩ ±5% ¼W
R322	1	1	1	1	RT0522214	Resistor, 2.2KΩ ±5% ¼W
R323	1	1	1	1	RT0575214	Resistor, 7.5KΩ ±5% ¼W
R324	1	1	1	1	RT0575214	Resistor, 7.5KΩ ±5% ¼W
R325	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R326	1	1	1	1	RT0522414	Resistor, 220KΩ ±5% ¼W
R327	1	1	1	1	RT0515214	Resistor, 1.5KΩ ±5% ¼W
R328	1	1	1	1	RT0527214	Resistor, 2.7KΩ ±5% ¼W
R329	1	1	1	1	RC0000012	Resistor, 0Ω
C101	1	1	1	1	CA3250002	Variable Cap., FM-3 AM-2
C103	1	1	1	1	DD1210001	Ceramic Cap., 10pF ±1pF
C104	1	1	1	1	DK1710201	Ceramic Cap., 0.001μF ±20%
C105	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C106	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C107	1	1	1	1	DD1210001	Ceramic Cap., 10pF ±1pF
C108	1	1	1	1	DD1207003	Ceramic Cap., 7pF ±1pF
C109	1	1	1	1	DD1530101	Ceramic Cap., 300pF ±5%
C110	1	1	1	1	DD1615003	Ceramic Cap., 15pF ±10%
C111	1	1	1	1	DK1710201	Ceramic Cap., 0.001μF ±20%
C112	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C113	1	1	1	1	DD1520002	Ceramic Cap., 20pF ±5%
C114	1	1	1	1	DD1207003	Ceramic Cap., 7pF ±1pF
C115	1	1	1	1	DD1520001	Ceramic Cap., 20pF ±5%
C116	1	1	1	1	DD1103001	Ceramic Cap., 3pF ±0.5pF
C117	1	1	1	1	DD1520001	Ceramic Cap., 20pF ±5%
C118	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C119	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C120	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C121	1	1	1	1	EV2240356	Electrolytic Cap., 0.022μF 35V
C122	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C123	1	1	1	1	DD1650101	Ceramic Cap., 500pF ±10%
C124	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C125	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C126	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C127	1	1	1	1	DD1620001	Ceramic Cap., 20pF ±10%
C128	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C129	1	1	1	1	EA1060169	Electrolytic Cap., 10μF 16V
C130	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C131	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C132	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C133	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C134	1	1	1	1	DD1610101	Ceramic Cap., 100pF ±10%
C135	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C136	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C137	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C138	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C139	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C140	1	1	1	1	EA1060169	Electrolytic Cap., 10μF 16V
C141	1	1	1	1	DD1620101	Ceramic Cap., 200pF ±10%
C142	1	1	1	1	DD1620101	Ceramic Cap., 200pF ±10%
C143	1	1	1	1	DD1610101	Ceramic Cap., 100pF ±10%
C144	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C145	1	1	1	1	EA4760169	Electrolytic Cap., 47μF 16V
C146	1	1	1	1	EA1060169	Electrolytic Cap., 10μF 16V
C147	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C148	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C149	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C150	1	1	1	1	DD1610101	Ceramic Cap., 100pF ±10%
C151	1	1	1	1	DK1820302	Ceramic Cap., 0.02μF ±100%
C152	1	1	1	1	EA1050509	Electrolytic Cap., 1μF 50V
C153	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C154	1	1	1	1	DD1525002	Ceramic Cap., 25pF ±5%
C202	1	1	1	1	DF6535101	Film Cap., 350pF ±5%
C203	1	1	1	1	DD1520001	Ceramic Cap., 20pF ±5%
C204	1	1	1	1	DF1710301	Film Cap., 0.01μF ±20%
C205	1	1	1	1	DF1710301	Film Cap., 0.01μF ±20%
C206	1	1	1	1	DF1710301	Film Cap., 0.01μF ±20%
C207	1	1	1	1	EA1050509	Electrolytic Cap., 1μF 50V
C208	1	1	1	1	EA4750359	Electrolytic Cap., 4.7μF 35V
C209	1	1	1	1	EA3350509	Electrolytic Cap., 3.3μF 50V
C210	1	1	1	1	DK1710201	Ceramic Cap., 0.001μF ±20%
C211	1	1	1	1	DF1682201	Film Cap., 0.0082μF ±10%
C212	1	1	1	1	DF1710301	Film Cap., 0.01μF ±20%
C213	1	1	1	1	EA1070169	Electrolytic Cap., 100μF 16V
C214	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C215	1	1	1	1	EV2240356	Electrolytic Cap., 0.22μF 35V
C216	1	1	1	1	EA1070169	Electrolytic Cap., 100μF 16V
C217	1	1	1	1	DK1840302	Ceramic Cap., 0.04μF ±100%
C218	1	1	1	1	DK1710301	Ceramic Cap., 0.01μF ±20%
C219	1	1	1	1	DD1525002	Ceramic Cap., 25pF ±5%
C301	1	1	1	1	EA1060169	Electrolytic Cap., 10μF 16V
C302	1	1	1	1	DF1622201	Film Cap., 0.0022μF ±10%
C303	1	1	1	1	DF5547101	Film Cap., 470pF ±5%
C304	1	1	1	1	EQ2240501	Electrolytic Cap., 0.22μF 50V
C305	1	1	1	1	EQ4740501	Electrolytic Cap., 0.47μF 50V
C306	1	1	1	1	EQ2240501	Electrolytic Cap., 0.22μF 50V
C307	1	1	1	1	DF1747301	Film Cap., 0.047μF ±20%
C310	1	1	1	1	EA2270169	Electrolytic Cap., 220μF 16V
C311	1	1	1	1	DF1639201	Film Cap., 0.0039μF ±10%
C312	1	1	1	1	DF1639201	Film Cap., 0.0039μF ±10%
C313	1	1	1	1	DF1533201	Film Cap., 0.0033μF ±5%
C314	1	1	1	1	DF1533201	Film Cap., 0.0033μF ±5%
C315	1	1	1	1	DF1633201	Film Cap., 0.0033μF ±10%
C316	1	1	1	1	DF1633201	Film Cap., 0.0033μF ±10%
C317	1	1	1	1	DD1536101	Ceramic Cap., 360pF ±5%
C318	1	1	1	1	DD1536101	Ceramic Cap., 360pF ±5%
C319	1	1	1	1	DF5582101	Film Cap., 820pF ±5%

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	QTY				PART NO.	DESCRIPTION
	U	C	E	N		
C320	1	1	1	1	DF5582101	Film Cap., 820pF ±5%
C321	1	1			DF1568201	Film Cap., 6800pF ±5%
C321			1	1	DF1547201	Film Cap., 4700pF ±5%
C322	1	1			DF1568201	Film Cap., 6800pF ±5%
C322			1	1	DF1547201	Film Cap., 4700pF ±5%
C323	1	1	1	1	EV4740356	Electrolytic Cap., 0.47μF 30V
C324	1	1	1	1	EV4740356	Electrolytic Cap., 0.47μF 30V
C325	1	1	1	1	EV4740356	Electrolytic Cap., 0.47μF 30V
C326	1	1	1	1	EV4740356	Electrolytic Cap., 0.47μF 30V
L101	1	1	1	1	LA1202612	Ant. Coil, FM
L102	1	1	1	1	LA1202610	RF Coil, FM
L103	1	1	1	1	LO1203601	Osc. Coil, FM
L104	1	1	1	1	LC1751001	Choke Coil, 0.75μH
L105	1	1	1	1	LI1001601	IFT, FM
L106	1	1	1	1	LI1401623	IFT, FM
L107	1	1	1	1	LI1015602	IFT, FM
L202	1	1	1	1	LO1001049	Osc. Coil, AM
L203	1	1	1	1	LI1028003	IFT, AM
L204	1	1	1	1	LI1001064	IFT, AM
L206	1	1	1	1	LC2105001	Choke Coil, 1mH
L301	1	1	1	1	LC2226004	Choke Coil, 22mH
L302	1	1	1	1	LC2226004	Choke Coil, 22mH
L303	1	1	1	1	LC2476001	Choke Coil, 47mH
L304	1	1	1	1	LC2476001	Choke Coil, 47mH
F101	1	1	1	1	FF1107005	Ceramic Filter, SFE 10.7 MD-1
F102	1	1	1	1	FF1107005	Ceramic Filter, SFE 10.7 MD-1
H101	1	1	1	1	HF200551D	FET, 2SK55 (D)
H102	1	1	1	1	HT310471B	Transistor, 2SC1047 (B)
H103	1	1	1	1	HT304611B	Transistor, 2SC461 (B)
H104	1	1	1	1	HT308291C	Transistor, 2SC829 (C)
H105	1	1	1	1	HT308291C	Transistor, 2SC829 (C)
H106	1	1	1	1	HT308291C	Transistor, 2SC829 (C)
H107	1	1	1	1	HT308291C	Transistor, 2SC829 (C)
H108	1	1	1	1	HT308291D	Transistor, 2SC829 (D)
H109	1	1	1	1	HT308291B	Transistor, 2SC829 (B)
H110	1	1	1	1	HT308281C	Transistor, 2SC828 (R)
H111	1	1	1	1	HT308281C	Transistor, 2SC828 (R)
H112	1	1	1	1	HD1000302	Diode, 20A90
H113	1	1	1	1	HD1000302	Diode, 20A90
H114	1	1	1	1	HD2001105	Diode, 1S1555
H115	1	1	1	1	HD2001105	Diode, 1S1555
H116	1	1	1	1	HD1000302	Diode, 20A90
H117	1	1	1	1	HD1000302	Diode, 20A90
H118	1	1	1	1	HD1000302	Diode, 20A90
H119	1	1	1	1	HD1000302	Diode, 20A90
H201	1	1	1	1	HC1000301	IC, HA1151
H301	1	1	1	1	HC1000401	IC, HA1156
H302	1	1	1	1	HT105641B	Transistor, 2SA564 (Q)
H303	1	1	1	1	HT308281C	Transistor, 2SC828 (R)
H304	1	1	1	1	HT308281C	Transistor, 2SC828 (R)
H305	1	1	1	1	HT308281C	Transistor, 2SC828 (R)
H306	1	1	1	1	HT105641B	Transistor, 2SA 564 (Q)
H307	1	1	1	1	HT105641B	Transistor, 2SA 564 (Q)
J101	1	1	1	1	YP1000114	Plug
J102	1	1	1	1	YP1000114	Plug
J105	22	22	22	22	YP1000114	Plug
J126						
J131	1	1	1	1	YP1000114	Plug
J132	1	1	1	1	YP1000114	Plug
REF. DESIG.	QTY				PART NO.	DESCRIPTION
	U	C	E	N		
P400	1	1	1	1	YD2956104	P400 EQL. AMP BOARD
	1	1	1	1	ZZ2956104	P.W. Board
						P.W. Board Assembly
P408	2	2	2	2	293311802	Spacer, R421
R401	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R402	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R403	1	1	1	1	RT0551114	Resistor, 510Ω ±5% ¼W
R404	1	1	1	1	RT0551114	Resistor, 510Ω ±5% ¼W
R405	1	1	1	1	RT0562314	Resistor, 62KΩ ±5% ¼W
R406	1	1	1	1	RT0562314	Resistor, 62KΩ ±5% ¼W
R407	1	1	1	1	RN0527414	Resistor, 270KΩ ±5% ¼W
R408	1	1	1	1	RN0527414	Resistor, 270KΩ ±5% ¼W
R409	1	1	1	1	RN0518414	Resistor, 180KΩ ±5% ¼W
R410	1	1	1	1	RN0518414	Resistor, 180KΩ ±5% ¼W
R411	1	1	1	1	RN0527414	Resistor, 270KΩ ±5% ¼W
R412	1	1	1	1	RN0527414	Resistor, 270KΩ ±5% ¼W
R413	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R414	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R415	1	1	1	1	RT0568114	Resistor, 680Ω ±5% ¼W
R416	1	1	1	1	RT0568114	Resistor, 680Ω ±5% ¼W
R417	1	1	1	1	RT0547314	Resistor, 47KΩ ±5% ¼W
R418	1	1	1	1	RT0547314	Resistor, 47KΩ ±5% ¼W
R419	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R420	1	1	1	1	RT0522314	Resistor, 22KΩ ±5% ¼W
R421	1	1	1	1	RT0522114	Resistor, 220Ω ±5% ¼W
R422	1	1	1	1	RT0518414	Resistor, 180KΩ ±5% ¼W
C401	1	1	1	1	EV3350256	Electrolytic Cap., 33μF 25V
C402	1	1	1	1	EV3350256	Electrolytic Cap., 33μF 25V
C403	1	1	1	1	DD1650001	Ceramic Cap., 50pF ±10%
C404	1	1	1	1	DD1650001	Ceramic Cap., 50pF ±10%
C405	1	1	1	1	EA1070109	Electrolytic Cap., 100μF 10V
C406	1	1	1	1	EA1070109	Electrolytic Cap., 100μF 10V
C407	1	1	1	1	DK1710201	Ceramic Cap., 0.001μF ±20%
C408	1	1	1	1	DK1710201	Ceramic Cap., 0.001μF ±20%
C409	1	1	1	1	DF1512301	Film Cap., 0.012μF ±5%
C410	1	1	1	1	DF1512301	Film Cap., 0.012μF ±5%
C411	1	1	1	1	DF1533201	Film Cap., 0.0033μF ±5%
C412	1	1	1	1	DF1533201	Film Cap., 0.0033μF ±5%
C413	1	1	1	1	EA1050509	Electrolytic Cap., 1μF 50V
C415	1	1	1	1	EE1050505	Electrolytic Cap., 1.0μF 50V
C416	1	1	1	1	EE1050505	Electrolytic Cap., 1.0μF 50V
C417	1	1	1	1	EA1070359	Electrolytic Cap., 100μF 35V
H401	1	1	1	1	HC1001105	IC, TA7129P
H402	1	1	1	1	HC1001105	IC, TA7129P
J401						
J408	8	8	8	8	YP1000113	Plug
P700	1	1	1	1	YD2956101	P700 MAIN AMP. BOARD
	1	1	1	1	ZZ2956101	P.W. Board
						P.W. Board Assembly
P708	8	8	8	8	293311802	Spacer R735~R738
R701	1	1	1	1	RT0510414	Resistor, 100KΩ ±5% ¼W
R702	1	1	1	1	RT0510414	Resistor, 100KΩ ±5% ¼W
R703	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W
R704	1	1	1	1	RT0510214	Resistor, 1KΩ ±5% ¼W

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R705	1	1	1	1	RT0520414	Resistor, 200K Ω \pm 5% $\frac{1}{4}$ W
R706	1	1	1	1	RT0520414	Resistor, 200K Ω \pm 5% $\frac{1}{4}$ W
R707	1	1	1	1	RT0539314	Resistor, 39K Ω \pm 5% $\frac{1}{4}$ W
R708	1	1	1	1	RT0539314	Resistor, 39K Ω \pm 5% $\frac{1}{4}$ W
R709	1	1	1	1	RT0515414	Resistor, 150K Ω \pm 5% $\frac{1}{4}$ W
R710	1	1	1	1	RT0515414	Resistor, 150K Ω \pm 5% $\frac{1}{4}$ W
R711	1	1	1	1	RT0556214	Resistor, 5.6K Ω \pm 5% $\frac{1}{4}$ W
R712	1	1	1	1	RT0556214	Resistor, 5.6K Ω \pm 5% $\frac{1}{4}$ W
R713	1	1	1	1	RT0539114	Resistor, 390 Ω \pm 5% $\frac{1}{4}$ W
R714	1	1	1	1	RT0539114	Resistor, 390 Ω \pm 5% $\frac{1}{4}$ W
R715	1	1	1	1	RT0510114	Resistor, 100 Ω \pm 5% $\frac{1}{4}$ W
R716	1	1	1	1	RT0510114	Resistor, 100 Ω \pm 5% $\frac{1}{4}$ W
R717	1	1	1	1	RT0527214	Resistor, 2.7K Ω \pm 5% $\frac{1}{4}$ W
R718	1	1	1	1	RT0527214	Resistor, 2.7K Ω \pm 5% $\frac{1}{4}$ W
R719	1	1	1	1	RT0539114	Resistor, 390 Ω \pm 5% $\frac{1}{4}$ W
R720	1	1	1	1	RT0539114	Resistor, 390 Ω \pm 5% $\frac{1}{4}$ W
R721	1	1	1	1	RT0568214	Resistor, 6.8K Ω \pm 5% $\frac{1}{4}$ W
R722	1	1	1	1	RT0568214	Resistor, 6.8K Ω \pm 5% $\frac{1}{4}$ W
R723	1	1	1	1	RT0582214	Resistor, 8.2K Ω \pm 5% $\frac{1}{4}$ W
R724	1	1	1	1	RT0582214	Resistor, 8.2K Ω \pm 5% $\frac{1}{4}$ W
R725	1	1	1	1	RT0536214	Resistor, 3.6K Ω \pm 5% $\frac{1}{4}$ W
R726	1	1	1	1	RT0536214	Resistor, 3.6K Ω \pm 5% $\frac{1}{4}$ W
R727	1	1	1	1	RA0102021	Resistor, 1K Ω (B)
R728	1	1	1	1	RA0102021	Resistor, 1K Ω (B)
R729	1	1	1	1	RT0510014	Resistor, 10 Ω \pm 5% $\frac{1}{4}$ W
R730	1	1	1	1	RT0510014	Resistor, 10 Ω \pm 5% $\frac{1}{4}$ W
R731	1	1	1	1	GF0547114	Resistor, 470 Ω \pm 5% $\frac{1}{4}$ W
R732	1	1	1	1	GF0547114	Resistor, 470 Ω \pm 5% $\frac{1}{4}$ W
R733	1	1	1	1	GF0510014	Resistor, 10 Ω \pm 5% $\frac{1}{4}$ W
R734	1	1	1	1	GF0510014	Resistor, 10 Ω \pm 5% $\frac{1}{4}$ W
R735	1	1	1	1	GK0547202	Resistor, 0.47 Ω \pm 5% 2W
R736	1	1	1	1	GK0547202	Resistor, 0.47 Ω \pm 5% 2W
R737	1	1	1	1	GK0547202	Resistor, 0.47 Ω \pm 5% 2W
R738	1	1	1	1	GK0547202	Resistor, 0.47 Ω \pm 5% 2W
R739	1	1	1	1	RC1010012	Resistor, 10 Ω \pm 10% $\frac{1}{2}$ W
R740	1	1	1	1	RC1010012	Resistor, 10 Ω \pm 10% $\frac{1}{2}$ W
R741	1	1	1	1	RC1002212	Resistor, 22 Ω \pm 10% $\frac{1}{2}$ W
R742	1	1	1	1	RC1002212	Resistor, 22 Ω \pm 10% $\frac{1}{2}$ W
R743	1	1	1	1	RT0510314	Resistor, 10K Ω \pm 5% $\frac{1}{4}$ W
R744	1	1	1	1	RT0510314	Resistor, 10K Ω \pm 5% $\frac{1}{4}$ W
R745	1	1	1	1	RC1022112	Resistor, 220 Ω \pm 10% $\frac{1}{2}$ W
R746	1	1	1	1	RC1022112	Resistor, 220 Ω \pm 10% $\frac{1}{2}$ W
C701	1	1	1	1	EV1050256	Electrolytic Cap., 1 μ F 25V
C702	1	1	1	1	EV1050256	Electrolytic Cap., 1 μ F 25V
C703	1	1	1	1	EA4760509	Electrolytic Cap., 47 μ F 50V
C704	1	1	1	1	EA4760509	Electrolytic Cap., 47 μ F 50V
C705	1	1	1	1	EE1070355	Electrolytic Cap., 100 μ F 35V
C706	1	1	1	1	EE1070355	Electrolytic Cap., 100 μ F 35V
C707	1	1	1	1	EA1070359	Electrolytic Cap., 100 μ F 35V
C708	1	1	1	1	EA1070359	Electrolytic Cap., 100 μ F 35V
C709	1	1	1	1	EA1070109	Electrolytic Cap., 100 μ F 10V
C710	1	1	1	1	EA1070109	Electrolytic Cap., 100 μ F 10V
C711	1	1	1	1	DD1610001	Ceramic Cap., 10pF \pm 10%
C712	1	1	1	1	DD1610001	Ceramic Cap., 10pF \pm 10%
C713	1	1	1	1	DD1650001	Ceramic Cap., 50pF \pm 10%
C714	1	1	1	1	DD1650001	Ceramic Cap., 50pF \pm 10%
C715	1	1	1	1	DD1615101	Ceramic Cap., 150pF \pm 10%
C716	1	1	1	1	DD1615101	Ceramic Cap., 150pF \pm 10%
C717	1	1	1	1	DD1610101	Ceramic Cap., 100pF \pm 10%
C718	1	1	1	1	DD1610101	Ceramic Cap., 100pF \pm 10%
C719	1	1	1	1	DF1610405	Film Cap., 0.1 μ F \pm 10%
C720	1	1	1	1	DF1610405	Film Cap., 0.1 μ F \pm 10%
C721	1	1	1	1	EB2280355	Electrolytic Cap., 2200 μ F 35V
C722	1	1	1	1	EB2280355	Electrolytic Cap., 2200 μ F 35V
C723	1	1	1	1	EA1050509	Electrolytic Cap., 1 μ F 50V
C724	1	1	1	1	EA1050509	Electrolytic Cap., 1 μ F 50V
L701	1	1	1	1	LC2272001	Choke Coil, 2.7 μ H \pm 20%
L702	1	1	1	1	LC2272001	Choke Coil, 2.7 μ H \pm 20%
M701	1	1	1	1	IN1006035	Lamp, 6V
M702	1	1	1	1	IN1006035	Lamp, 6V
J701	9	9	9	9	YP1000113	Plug
J709	1	1	1	1	RC0000012	Resistor, 0 Ω
R752	1	1	1	1	RC0000012	Resistor, 0 Ω
R747	1	1	1	1	RC0000012	Resistor, 0 Ω
R748	1	1	1	1	RC0000012	Resistor, 0 Ω
R749	1	1	1	1	RC0000012	Resistor, 0 Ω
R750	1	1	1	1	RC0000012	Resistor, 0 Ω
R751	1	1	1	1	RC0000012	Resistor, 0 Ω
H701	1	1	1	1	HT105641K	Transistor, 2SA564AC
H702	1	1	1	1	HT105641K	Transistor, 2SA564AC
H703	1	1	1	1	HT313842C	Transistor, 2SC1384 R or S
H704	1	1	1	1	HT313842C	Transistor, 2SC1384 R or S
H705	1	1	1	1	HT308281D	Transistor, 2SC828 S
H706	1	1	1	1	HT308281D	Transistor, 2SC828 S
H707	1	1	1	1	HT313842B	Transistor, 2SC1384 Q or R
H708	1	1	1	1	HT313842B	Transistor, 2SC1384 Q or R
H709	1	1	1	1	HT106842B	Transistor, 2SA684 Q or R
H710	1	1	1	1	HT106842B	Transistor, 2SA684 Q or R
H711	1	1	1	1	HT403131D	Transistor, 2SD313D or E
H712	1	1	1	1	HT403131D	Transistor, 2SD313D or E
H713	1	1	1	1	HT205071D	Transistor, 2SB507D or E
H714	1	1	1	1	HT205071D	Transistor, 2SB507D or E
P800	1	1	1	1	YD2956103	P800 POWER SUPPLY BOARD
	1	1	1	1	ZZ2956103	P.W. Board Assembly
P808	10	10	10	10	293311802	Spacer, R802, R807, H806,808
P809	10	10	10	10	293311801	Spacer, R801, R802~H805
R801	1	1	1	1	GJ0533103	Resistor, 330 Ω \pm 5% 3W
R802	1	1	1	1	GJ0522102	Resistor, 220 Ω \pm 5% 2W
R803	1	1	1	1	RC1056012	Resistor, 56 Ω \pm 10% $\frac{1}{2}$ W
R804	1	1	1	1	RT0518314	Resistor, 18K Ω \pm 5% $\frac{1}{4}$ W
R805	1	1	1	1	RT0510414	Resistor, 100K Ω \pm 5% $\frac{1}{4}$ W
R806	1	1	1	1	RC1010012	Resistor, 10 Ω \pm 10% $\frac{1}{2}$ W
R807	1	1	1	1	GF0533012	Resistor, 33 Ω \pm 5% $\frac{1}{2}$ W
C801	1	1	1	1	DK1810351	Ceramic Cap., 0.01 μ F \pm 20%
C802	1	1	1	1	DK1810351	Ceramic Cap., 0.01 μ F \pm 20%
C803	1	1	1	1	EB3380552	Electrolytic Cap., 3300 μ F 55V
C804	1	1	1	1	EA3370509	Electrolytic Cap., 330 μ F 50V
C805	1	1	1	1	EA3370359	Electrolytic Cap., 330 μ F 35V
C806	1	1	1	1	EA2270169	Electrolytic Cap., 220 μ F 16V
C807	1	1	1	1	EA2270509	Electrolytic Cap., 220 μ F 50V
C808	1	1	1	1	EA1070509	Electrolytic Cap., 220 μ F 50V
C809	1	1	1	1	DK1840301	Ceramic Cap., 0.04 μ F \pm 20%
C810	1	1	1	1	EA4770169	Electrolytic Cap., 470 μ F 16V
H801	1	1	1	1	HT314072B	Transistor, 2SC1407 (Q or R)

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
H802	1	1	1	1	HD2000901	Diode, U05B
H803	1	1	1	1	HD2000901	Diode, U05B
H804	1	1	1	1	HD2000901	Diode, U05B
H805	1	1	1	1	HD2000901	Diode, U05B
H806	1	1	1	1	HD2000501	Diode, W06B
H807	1	1	1	1	HD2000501	Diode, W06B
H808	1	1	1	1	HD2000501	Diode, W06B
H809	1	1	1	1	HD3002709	Diode, WZ140
J801	16	16	16	16	YP1000113	Plug
J815						
PE01	1	1	1	1	YD2956102	P.W. Board
	1	1	1	1	ZZ2956102	P.W. Board Assembly
PE08	2	2	2	2	293311802	Spacer, RE45
RE01	1	1	1	1	RT0547214	Resistor, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RE02	1	1	1	1	RT0547214	Resistor, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RE03	1	1	1	1	RT0547414	Resistor, 470K Ω \pm 5% $\frac{1}{4}$ W
RE04	1	1	1	1	RT0547414	Resistor, 470K Ω \pm 5% $\frac{1}{4}$ W
RE05	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE06	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE07	1	1	1	1	RT0522314	Resistor, 22K Ω \pm 5% $\frac{1}{4}$ W
RE08	1	1	1	1	RT0522214	Resistor, 2.2K Ω \pm 5% $\frac{1}{4}$ W
RE09	1	1	1	1	RN0510514	Resistor, 1M Ω \pm 5% $\frac{1}{4}$ W
RE10	1	1	1	1	RN0510514	Resistor, 1M Ω \pm 5% $\frac{1}{4}$ W
RE11	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RE12	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RE13	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE14	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE15	1	1	1	1	RT0575214	Resistor, 7.5K Ω \pm 5% $\frac{1}{4}$ W
RE16	1	1	1	1	RT0575214	Resistor, 7.5K Ω \pm 5% $\frac{1}{4}$ W
RE17	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE18	1	1	1	1	RT0510214	Resistor, 1K Ω \pm 5% $\frac{1}{4}$ W
RE19	1	1	1	1	RT0522414	Resistor, 220K Ω \pm 5% $\frac{1}{4}$ W
RE20	1	1	1	1	RT0522414	Resistor, 220K Ω \pm 5% $\frac{1}{4}$ W
RE21	1	1	1	1	RT0522314	Resistor, 22K Ω \pm 5% $\frac{1}{4}$ W
RE22	1	1	1	1	RT0522314	Resistor, 22K Ω \pm 5% $\frac{1}{4}$ W
RE23	1	1	1	1	RT0520314	Resistor, 20K Ω \pm 5% $\frac{1}{4}$ W
RE24	1	1	1	1	RT0520314	Resistor, 20K Ω \pm 5% $\frac{1}{4}$ W
RE25	1	1	1	1	RT0527314	Resistor, 27K Ω \pm 5% $\frac{1}{4}$ W
RE26	1	1	1	1	RT0527314	Resistor, 27K Ω \pm 5% $\frac{1}{4}$ W
RE27	1	1	1	1	RT0568214	Resistor, 6.8K Ω \pm 5% $\frac{1}{4}$ W
RE28	1	1	1	1	RT0568214	Resistor, 6.8K Ω \pm 5% $\frac{1}{4}$ W
RE29	1	1	1	1	RT0582214	Resistor, 8.2K Ω \pm 5% $\frac{1}{4}$ W
RE30	1	1	1	1	RT0582214	Resistor, 8.2K Ω \pm 5% $\frac{1}{4}$ W
RE31	1	1	1	1	RT0512314	Resistor, 12K Ω \pm 5% $\frac{1}{4}$ W
RE32	1	1	1	1	RT0512314	Resistor, 12K Ω \pm 5% $\frac{1}{4}$ W
RE33	1	1	1	1	RM0104005	Variable Resistor, 100K(B)
RE34	1	1	1	1	RM0104005	Variable Resistor, 100K(B)
RE35	1	1	1	1	RT0522514	Resistor, 2.2M Ω \pm 5% $\frac{1}{4}$ W
RE36	1	1	1	1	RT0522514	Resistor, 2.2M Ω \pm 5% $\frac{1}{4}$ W
RE37	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RE38	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RE39	1	1	1	1	RT0510314	Resistor, 10K Ω \pm 5% $\frac{1}{4}$ W
RE40	1	1	1	1	RT0510314	Resistor, 10K Ω \pm 5% $\frac{1}{4}$ W
RE41	1	1	1	1	RT0510114	Resistor, 100 Ω \pm 5% $\frac{1}{4}$ W
RE42	1	1	1	1	RT0510114	Resistor, 100 Ω \pm 5% $\frac{1}{4}$ W
RE43	1	1	1	1	RT0510414	Resistor, 100K Ω \pm 5% $\frac{1}{4}$ W
RE44	1	1	1	1	RT0510414	Resistor, 100K Ω \pm 5% $\frac{1}{4}$ W
RE45	1	1	1	1	RT0510114	Resistor, 100 Ω \pm 5% $\frac{1}{4}$ W
CE01	1	1	1	1	DF1722405	Film Cap., 0.22 μ F, 50V \pm 20%
CE02	1	1	1	1	DF1722405	Film Cap., 0.22 μ F, 50V \pm 20%
CE03	1	1	1	1	EE1050501	Electrolytic Cap., 1 μ F, 50V \pm 20%
CE04	1	1	1	1	EE1050501	Electrolytic Cap., 1 μ F, 50V \pm 20%
CE05	1	1	1	1	DF1622305	Film Cap., 0.022 μ F, 50V \pm 10%
CE06	1	1	1	1	DF1622305	Film Cap., 0.022 μ F, 50V \pm 10%
CE07	1	1	1	1	DF1622305	Film Cap., 0.022 μ F, 50V \pm 10%
CE08	1	1	1	1	DF1622305	Film Cap., 0.022 μ F, 50V \pm 10%
CE09	1	1	1	1	DF1610205	Film Cap., 0.001 μ F, 50V \pm 10%
CE10	1	1	1	1	DF1610205	Film Cap., 0.001 μ F, 50V \pm 10%
CE11	1	1	1	1	EE1050501	Electrolytic Cap., 1 μ F, 50V \pm 20%
CE12	1	1	1	1	EE1050501	Electrolytic Cap., 1 μ F, 50V \pm 20%
CE13	1	1	1	1	EE4750251	Electrolytic Cap., 4.7 μ F, 25V \pm 20%
CE14	1	1	1	1	EE4750251	Electrolytic Cap., 4.7 μ F, 25V \pm 20%
CE15	1	1	1	1	EQ4750161	Electrolytic Cap., 4.7 μ F, 16V \pm 30%
CE16	1	1	1	1	EQ4750161	Electrolytic Cap., 4.7 μ F, 16V \pm 30%
CE17	1	1	1	1	EA1070509	Electrolytic Cap., 100 μ F, 50V \pm 20%
HE01	1	1	1	1	HT313282A	Transistor, 2SC1328(S or T)
HE02	1	1	1	1	HT313282A	Transistor, 2SC1328(S or T)
HE03	1	1	1	1	HT107223A	Transistor, 2SA722(S,T,U)
HE04	1	1	1	1	HT107223A	Transistor, 2SA722(S,T,U)
HE05	1	1	1	1	HT313281T	Transistor, 2SC1328 (T)
HE06	1	1	1	1	HT313281T	Transistor, 2SC1328 (T)
JE01	10	10	10	10	YP1000113	Plug
JE10						
PH01	1	1	1	1	YD2956106	P.W. Board
	1	1	1	1	ZZ2956106	P.W. Board Assembly
RH01	1	1	1	1	RT0547214	Resistor, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RH02	1	1	1	1	RT0547214	Resistor, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RH03	1	1	1	1	RT0522514	Resistor, 2.2M Ω \pm 5% $\frac{1}{4}$ W
RH04	1	1	1	1	RT0522514	Resistor, 2.2M Ω \pm 5% $\frac{1}{4}$ W
CH01	1	1	1	1	DF1668205	Film Cap., 0.0068 μ F
CH02	1	1	1	1	DF1668205	Film Cap., 0.0068 μ F
SH01	1	1	1	1	SP0202008	Push Switch
JH01	7	7	7	7	YP1000113	Plug
JH07						
PT01	1	1	1	1	YD2956105	P.W. Board
	1	1	1	1	ZZ2956105	P.W. Board Assembly
RT01	1	1	1	1	RT0515314	Resistor, 15K Ω \pm 5% $\frac{1}{4}$ W
RT02	1	1	1	1	RT0515314	Resistor, 15K Ω \pm 5% $\frac{1}{4}$ W
RT03	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RT04	1	1	1	1	RT0568314	Resistor, 68K Ω \pm 5% $\frac{1}{4}$ W
RT05	1	1	1	1	RC0000012	Resistor, 0 Ω
RT06	1	1	1	1	RC0000012	Resistor, 0 Ω
CT01	1	1	1	1	DF1627305	Film Cap., 0.027 μ F
CT02	1	1	1	1	DF1627305	Film Cap., 0.027 μ F
CT03	1	1	1	1	DD1612101	Ceramic Cap., 120pF
CT04	1	1	1	1	DD1612101	Ceramic Cap., 120pF
JT01	11	11	11	11	YP1000113	Plug
JT11						
ST01	1	1	1	1	SP0202008	Push Switch

U: For U.S.A.
C: For Canada
E: For Europe
N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
PZ01	1	1	1	1	YD2886016	PZ01 DIAL LAMP BOARD
	1	1	1	1	ZZ2889116	P.W. Board
						P.W. Board Assembly
MZ01						
}	5	5	5	5	IN1008007	Lamp
MZ05						
JZ01						
}	10	10	10	10	YJ0800017	Socket
JZ10						
JZ11						
}	4	4	4	4	YP1000113	Plug
JZ14						
PR01				1	YD2975001	PR01 FUSE BOARD
				1	ZZ2975001	P.W. Board
						P.W. Board Assembly
JR07				6	YP1000113	Plug
}						
JR12						
JR01				6	YJ0800020	Socket
}						
JR06						
FR01				1	FS1035080	Fuse
FR02				1	FS1010080	Fuse
FR03				1	FS1010080	Fuse
PR01			1		YD2960103	PR01 FUSE BOARD
			1		ZZ2960303	P.W. Board
						P.W. Board Assembly
JR01				6	YJ0800020	Jack
}						
JR06						
JR07				6	YP1000113	Plug
}						
JR12						
FR01				1	FS1040006	Fuse, 4A 20mm
FR02				1	FS1010007	Fuse, 1A 20mm
FR03				1	FS1010007	Fuse, 1A 20mm
J001	1	1	1	1	YT0104015	Terminal, Ant.
J002	1	1	1	1	YL0102003	Terminal, 2P
J003	1	1	1	1	YT0201009	Terminal, Quad. Out.
J004	1	1	1	1	YT0204008	Terminal, Aux, Phono
J005	1	1	1	1	YT0204008	Terminal, Tape
J006	1	1	1	1	YT0101005	Terminal, Ground
J007	1	1	1	1	YJ0100098	Socket, Headphone
J008	1	1	1	1	YT0304006	Terminal, Speaker
J009	1	1	1	1	YT0304006	Terminal, Speaker
J010	1	1	1	1	YJ0800019	Socket, Meter Lamp
J011	1	1	1		YJ0400056	Jack, AC Outlet
J012	1	1			YJ0800012	Socket, Fuse Holder
J012			1	1	YJ0800022	Socket, Fuse Holder
J013			1	1	BY0311001	Selector, Voltage
J014				1	YP0400056	Socket, Inlet
J015				1	YT0101005	Terminal, Ground
J016		1			YL0102003	Terminal, 2P
J017				1	YJ0800009	Socket, Fuse Holder
S001	1	1	1	1	SR1005011	Rotary Switch, Selector
S002	1	1	1	1	SR0204007	Rotary Switch, Speaker

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
S003	1	1	1		SP0201015	Push Switch, Power
S003				1	SP0201017	Push Switch, Power
J018				1	YJ0800009	Socket, Fuse Holder
R001	1	1	1	1	GF0510212	Resistor, 1K Ω \pm 5% $\frac{1}{2}$ W
R002	1	1	1	1	GF0515112	Resistor, 150 Ω \pm 5% $\frac{1}{2}$ W
R003	1	1	1	1	GF0515112	Resistor, 150 Ω \pm 5% $\frac{1}{2}$ W
R004	1	1	1	1	GJ0533101	Resistor, 330 Ω \pm 5% 1W
R005	1	1	1	1	GJ0533101	Resistor, 330 Ω \pm 5% 1W
R006	1	1	1	1	RM0254022	Variable Resistor, Master
R007	1	1	1	1	RX0504003	Variable Resistor, Balance
R008	1	1			RC1022512	Resistor, 2.2M Ω \pm 10% $\frac{1}{2}$ W
C001	1	1	1	1	DK1710301	Ceramic Cap., 0.01 μ F \pm 20%
C002	1	1	1	1	DK1710301	Ceramic Cap., 0.01 μ F \pm 20%
C003	1	1	1	1	DK1710301	Ceramic Cap., 0.01 μ F \pm 20%
C004	1	1	1	1	EA4760109	Electrolytic Cap., 40 μ F 10V
L001	1	1	1	1	LC1154004	Choke Coil, 150 μ H
L002	1	1	1	1	LF1120043	Ant. Coil, AM
L003	1	1			TS1860302	Power Transformer
L003			1	1	TS1860303	Power Transformer
L004	1	1	1	1	LC1332002	Choke Coil, 3.3 μ H
G001	1	1			BF1040004	Printed Comp., 0.1 μ F +120 Ω
C005			1		DF1747351	Film Cap. 0.0047 μ \pm 20%
M001	1	1	1	1	IN1008034	Lamp, Stereo
M003	1	1	1	1	IN1008007	Lamp, Meter
M004	1	1	1	1	IM1104208	Meter, Tuning
F001	1	1			FS1020006	Fuse, 30mm UL
F001			1		FS1016002	Fuse, 20mm
F001				1	FS1016080	Fuse, SEMKO
F002		1			FS2020091	Fuse, 30mm UL
F003				1	FS1025080	Fuse, 20mm SEMKO
F004				1	FS1025080	Fuse, 20mm SEMKO
W001	1	1			YC0240022	AC Cord UL, CSA
W001			1		YC0190003	AC Cord

SPECIFICATIONS

Amplifier Section:

RATED POWER OUTPUT, MINIMUM	15 WATTS
CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN	
POWER BAND	40 Hz to 20 kHz
TOTAL HARMONIC DISTORTION	0.8%
LOAD IMPEDANCE	8 OHMS
I.M. Distortion	0.8%
(I.H.F. method, 60 Hz and 7 kHz mixed 4:1 at rated power output)	
Damping Factor	40

Preamplifier Section:

Phono

Input Overload at 1 kHz	100 mV
Equivalent Input Noise	2.5 μ V
Dynamic Range	92 dB
(Dynamic Range is the ratio of input overload to equivalent input noise)	
Input Sensitivity	2.2 mV
Input Impedance	47 k Ω
Frequency Response, RIAA	± 1 dB
Signal-to-Noise Ratio (at rated output and 7.75 mV input)	74 dB

High Level (Aux and Tape)

Input Sensitivity	150 mV
Input Impedance	100 k Ω
Frequency Response (includes power amp.)	20 Hz to 60 kHz ± 1.5 dB
	40 Hz to 20 kHz ± 0.5 dB
Signal-to-Noise Ratio (ref. to rated output and 775 mV input)	85 dB

Output Levels

Tape Out (ref. 7.75 mV at Phono inputs)	525 mV
---	--------

Output Impedance

Tape Out	3 k Ω
----------	--------------

FM Tuner Section:

Sensitivity

IHF 50 dB Quieting (mono)	4.0 μ V (17.3 dBf)
(stereo)	50 μ V (39.2 dBf)

Quieting Slope (Mono)

RF Input for 30 dB Quieting	2.2 μ V (12 dBf)
5 μ V (19 dBf)	48 dB
10 μ V (25 dBf)	55 dB
50 μ V (39 dBf)	63 dB
1000 μ V (65 dBf)	68 dB

Distortion (Mono)

at 50 dB Quieting, 1000 Hz	0.7%
at 65 dBf (1000 μ V), 1000 Hz	0.4%

Distortion (Stereo)

at 50 dB Quieting, 1000 Hz	0.8%
at 65 dBf (1000 μ V), 1000 Hz	0.7%

Hum and Noise

at 65 dBf (1000 μ V)	
Mono	68 dB
Stereo	55dB

SPECIFICATIONS

Amplifier Section:

RATED POWER OUTPUT, MINIMUM	15 WATTS
CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN	
POWER BAND	40 Hz to 20 kHz
TOTAL HARMONIC DISTORTION	0.8%
LOAD IMPEDANCE	8 OHMS
I.M. Distortion	0.8%
(I.H.F. method, 60 Hz and 7 kHz mixed 4:1 at rated power output)	
Damping Factor	40

Preamplifier Section:

Phono

Input Overload at 1 kHz	100 mV
Equivalent Input Noise	2.5 μ V
Dynamic Range	92 dB
(Dynamic Range is the ratio of input overload to equivalent input noise)	
Input Sensitivity	2.2 mV
Input Impedance	47 k Ω
Frequency Response, RIAA	± 1 dB
Signal-to-Noise Ratio (at rated output and 7.75 mV input)	74 dB

High Level (Aux and Tape)

Input Sensitivity	150 mV
Input Impedance	100 k Ω
Frequency Response (includes power amp.)	20 Hz to 60 kHz ± 1.5 dB
	40 Hz to 20 kHz ± 0.5 dB
Signal-to-Noise Ratio (ref. to rated output and 775 mV input)	85 dB

Output Levels

Tape Out (ref. 7.75 mV at Phono inputs)	525 mV
---	--------

Output Impedance

Tape Out	3 k Ω
----------	--------------

FM Tuner Section:

Sensitivity

IHF 50 dB Quieting (mono)	4.0 μ V (17.3 dBf)
(stereo)	50 μ V (39.2 dBf)

Quieting Slope (Mono)

RF Input for 30 dB Quieting	2.2 μ V (12 dBf)
5 μ V (19 dBf)	48 dB
10 μ V (25 dBf)	55 dB
50 μ V (39 dBf)	63 dB
1000 μ V (65 dBf)	68 dB

Distortion (Mono)

at 50 dB Quieting, 1000 Hz	0.7%
at 65 dBf (1000 μ V), 1000 Hz	0.4%

Distortion (Stereo)

at 50 dB Quieting, 1000 Hz	0.8%
at 65 dBf (1000 μ V), 1000 Hz	0.7%

Hum and Noise

at 65 dBf (1000 μ V)	
Mono	68 dB
Stereo	55dB

Frequency Response

30 Hz to 15 kHz

Mono ± 1.5 dB

Stereo ± 2.0 dB

Capture Ratio

at 45 dBf (100 μ V) 4.0 dB

at 65 dBf (1000 μ V) 3.0 dB

Alternate Channel Selectivity 50 dB

Spurious Response Rejection 80 dB

Image Response Rejection 50 dB

I.F. Rejection (Balanced) 70 dB

A.M. Suppression 45 dB

Stereo Separation

100 Hz 35 dB

1000 Hz 38 dB

10 kHz 30 dB

Subcarrier Rejection 55 dB

AM Tuner Section:

IHF Usable Sensitivity 25 μ V

Distortion (THD), 30% Modulation 0.7%

Signal-to-Noise Ratio 49 dB

Frequency Response (± 3 dB) 40 Hz to 2.3 kHz

Alternate Channel Selectivity 40 dB

Image Rejection 37 dB

Spurious Response Rejection 67 dB

I.F. Rejection 40 dB

General

Power Requirements 120 V AC, 50/60 Hz

Power Consumption at rated output, both channels operating (8 ohm loads) 95 Watts

Idling Power (volume control at zero) 25 Watts

Dimensions:

Panel Width 17-3/8 Inches

Panel Height 5-3/8 Inches

Depth 11-1/2 Inches

Weight:

Unit alone 20.90 lbs.

Packed for shipment 26.84 lbs.

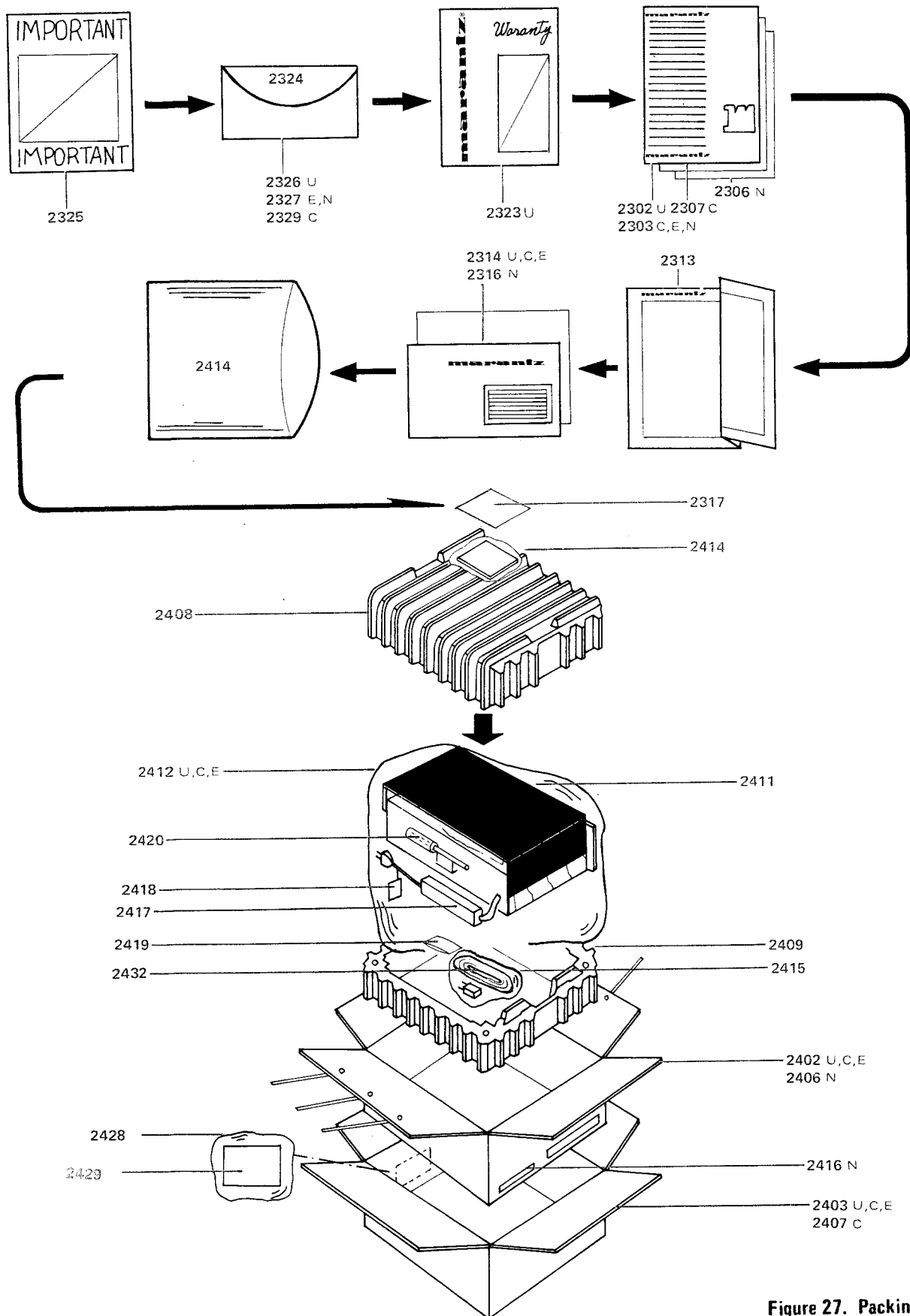


Figure 27. Packing